NEW ENGLAND FARMER

DEVOTED TO AGRICULTURE AND ITS KINDRED ARTS AND SCIENCES.

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NOURSE, EATON & TOLMAN, PROPRIETORS.
OFFICE....100 WASHINGTON STREET.

SIMON BROWN EDITOR.
HENRY F. FRENCH, ASSOCIATE EDITOR.

SUGGESTED BY THE MONTH OF MARCH.

"MARCH, March, Mars was your god-father,
Therefore, betimes you can bully and bluster."

MARCH, the third Month in the year, according to our calendar, had the honor of being first in the early Roman calendar, and it also marked the commencement of the year in some of the nations of Europe, till the eighteenth century.—The English legal year began March 25, until the change of style in 1752. But whether counted as the first, or as the third month of the year, its character for fickleness has ever been proverbial. With us it is the turning point of the season—a sort of battle-ground for the elements. Cold and heat, rain and snow, strive for the mastery,—now one and now the other obtaining temporary dominion. The English have transmitted to us a proverb to the effect that if March comes in as mild as a lamb, it will go out as rough as a lion, and *vice versa*. The Scotch have a saying, when the last three days of this month are stormy, that March borrows them of April, and that,

"The first it shall be wind and weet;
The next it shall be snow and sleet;
The third it shall be sic a freeze,
Shall gar the birds stick to the trees."

Another proverbial slander on the character of this month—and one of New England origin undoubtedly—is the accusation of its affording six weeks' sledding! And yet, after all that has been or may be said against this month, we would most heartily adopt—changing a single word,—the expression of a celebrated poet, and say,

"Old March, with all thy faults, I love thee still."

It is the month in which our plans for the season's operations should be matured, and in which all should be attempted which it is possible for us to prepare for the brief period into which Spring's work is crowded in our climate. While it is true that more or less may generally be done that shall directly forward the important business of the approaching season, March is nevertheless the grand *make-ready* month of the year, and our "good luck" during the whole season may hinge on the use we make of the thirty-one days that come one after another, between February and April.

The doctors have a proverb, that "to know the disease is half its cure." Whether it will do for farmers to adopt a similar sentiment, by saying to know our wants or needs is half their supply, we all know by sorry experience, it will do for us to say, that there is often much lost in a driving time by want of such preparation as might have been made at a more leisure season. Shall the same lesson be again repeated by the same old schoolmaster? Has not his tuition been rather expensive? And had not we better try the cheaper system of "a stitch in time saves nine," this year, beginning, if we can find nothing better, with the ancient problem of taking time by the forelock.

Having carefully decided not only what fields shall be cultivated, but what crop shall be grown on each lot, and how manured and worked, we shall not be likely to forget the preparation of all the seeds we intend to plant. Nor will the tools and implements be forgotten. Each one should be carefully examined, and if found out of order, or in any way unfit for service, now is the time to repair it, or procure a newer, and if possible, a better one.

But by whom shall these repairs be made?

Our attention has been directed to this subject by reading an article recently published in one of the most popular agricultural papers of the country, in which the writer very strongly advises farmers to fit up a convenient shop, and procure the necessary tools for making these repairs themselves. The main argument adduced in favor of this course, and one several times repeated, was to the effect that by this arrangement employment would be furnished to the farmer and his boys during odd hours and rainy days. This, somehow, stirred up in our minds recollections far more vivid than pleasant of the "odd hours and rainy days" of our own boyhood. We thought then, and a slight sprinkle of gray hairs has only deepened the conviction, that boys are sometimes worked too hard upon the farm. That there always has been danger of this being done is evident from the proverb,

"All work and no play, makes Jack run away."

Another thought occurs to our mind in connection with farmers' boys and workshops. The farmer generally speaks as though his own business was not a trade. If one of his boys drives pegs into a shoe, he is said to be "learning a trade;" while his other sons, who work upon the farm, are spoken of and spoken to, merely as "staying at home." What injustice to the discipline of the farm! What injustice to the proficiency which his sons are making in the mechanical or operatic skill necessary to perform the labor of the farm! The farmer, no less than the mechanic, serves an apprenticeship; and no less than the mechanic, he has a trade. Let a city boy, or any one who has never "learned the trade," undertake to chop, or hoe, or reap, or mow, or "either hold or drive" in plowing, or milk, or thresh, or bind grain, or pitch hay, or a great many other things that the farmer's son learns during his minority to do easily, and even gracefully, and it will be seen, by the awkward motions and slow progress of the city boy, that farming is indeed a trade, and further experience will show him, that like all others, it is not easily acquired in advanced life. The difficulty of performing farm work is not appreciated, because the requisite skill is gained gradually during the whole period of minority. The practical skill acquired in learning the trade of farming, says Prof. FISK, of the Agricultural College of Michigan, embraces an acquaintance with the mode of handling each farm implement. It is a knowledge of the *how*, including both the ideal conception of the manner of doing and the training of the muscles for the performance of the work in exact conformity with the mental conception. This skill in the discharge of farm duties includes the education of the mind, the education of the eye and the education of the muscles for their several offices in the practical details of agriculture.

But a skilful use of implements is but a small part of the farmer's trade. The proper management of various soils and manures, the culture of crops, the raising of stock, each and all demand his thought, his labor, his skill, his odd hours and his rainy days.

Reverting now to our question about repairing agricultural implements, we leave it with the good judgment of each individual to determine—and March is a good month in which to debate the question—how many odd hours and rainy days himself and boys shall devote to the practice of the art and mystery of handicraft pertaining to the business of the carpenter, the wheelwright, the blacksmith, the shoemaker or the saddler.

For the New England Farmer.

PLANNING AND PREPARING WORK.

MR. EDITOR:—It is generally admitted, I believe, that order and system are essential to success in every kind of business. It is especially so in farming. It will not do for the farmer to plod heedlessly on, day after day, and week after week, trusting to fortunate and fortuitous circumstances, without having any previous plan or arrangement in his business. To be successful in his business, the farmer must plan and prepare his work beforehand, so as to be ready to take it up at the proper time, and to do it in a proper manner. There must be order and system in all his plans and arrangements, so as not to have one kind of business interfere with another. Every kind of work should be done at the right time, and in a proper manner.

There are some kinds of farm work, undoubtedly, that may be done about as well at one time as another, provided they be well done. There are other kinds of work, however, that require to be done at a particular time, or within the limits of a particular space of time. There are several kinds of work that cannot be done before nor after the limits of a particular space of time, without failing to be successful in their results. It will not do to plant and sow before the earth is in a condition to receive the seed into its bosom, nor to gather in the crops of the season before they have come to maturity. Nor will it do to plant and sow after the appropriate season has passed, nor to gather in the crops after they have been wasted by the storms of the season. There is a particular season or space of time in which all such work should be done.

A successful farmer plans and prepares his work beforehand for every season of the year. He knows that every season has business enough of its own without being encumbered with what belongs to a different season; that in the spring and summer, especially, a large amount of work is necessarily crowded into a very small space of time, which, to be done well, must be done then, or not at all. Having planned and prepared his work, and made his calculations accordingly, he takes up each particular kind of work at its appropriate time, performs it skilfully, and finishes it before engaging

in another or different kind of business. He does not allow himself to be interrupted in his work by the calls of other business, such as mending fences, repairing tools, running here and there, doing this and that. No; having planned and prepared his work beforehand, he proceeds with great regularity, and attends to everything in its order.

The winter is a season of comparative leisure, in which the farmer has a plenty of time to plan and prepare his work for the more active and engrossing employments of spring and summer. It is the time for study; for reading, reflection and discussion; for making calculations, maturing plans, and preparing work; and last, not least, for cultivating the social affections. By availing himself of favorable weather and circumstances, during this inclement season, he can do much work, too, which will advance his operations and facilitate his business during the coming season. The same is true with regard to the autumn. Late in the autumn, that is, after the ingathering of the fruits of the season, the farmer enjoys an amount of leisure which might be profitably employed in doing such work as may be done about as well at one time as another, such as breaking up greensward, ditching, hauling out muck, picking up stones, building walls, repairing fences, &c. If such work be done in the autumn, and well done, so much time is gained for the operations of spring and summer work. In the spring, in preparing the ground and sowing the seed, a great amount and variety of work is crowded into a very small space of time, all of which must be done within the limits of a very few days. It seems as though a half a dozen kinds of work required to be done at the same time, and would not wait, the one for the other. The same is true with regard to summer, or the haying season. The time for cutting and curing hay, so as to preserve its valuable properties, and to have it palatable and nutritious, is short, very short; and it should be done at the proper time, and in a proper manner. The way to accomplish this object, is to plan and prepare the work beforehand. "To make hay while the sun shines," requires the previous preparation of scythes, rakes, forks, carts, &c.

Warwick, Jan., 1862. JOHN GOLDSBURY.

For the New England Farmer.

AGRICULTURAL SCHOOLS.

We are informed by sacred history, that when man was created, he was placed in a garden, and commanded to prune, and water, and care for it, in such a way as would cause it to yield fruit for his sustenance; therefore, it would seem to us that tilling the soil is an employment which is the most natural to mankind, besides being pleasing to his Maker. I would not be understood by any, that I think all men should be farmers, or that man is in an error when he forsakes farming, for certainly we must have mechanics, and merchants, else even the farmer would not prosper in his employment; but this I must say, farming is neglected: it is done too much on the "one horse" principle.

With too many, the idea is prevalent, that if they can get in a little corn, a few potatoes, a small piece of rye, barely enough to "keep soul and body together" from one end of the year to the other, why that is enough; all that they can expect to do. For every thing else, we have schools, and good schools as a general thing; millions of dollars are spent annually for the support of schools to educate our children in many a branch, for which, in after life, they never realize the value of a ten-cent piece, while an agricultural school is hardly to be found in the country. To be sure there are some, but poor specimens at the best, when compared with the other schools of our land. At the present time, when farming seems to be the safest, and almost the only business by which man can earn a livelihood, let us not neglect it; and while other business declines, let us strive to make farming more profitable and prosperous.

Let us have schools for the farmer's benefit especially; schools in which nothing but agriculture in its various branches shall be taught. Many, to be sure, are so prejudiced, that they would not send a child to them, preferring rather to make his boy learn his lessons by sad and often costly experience, rather than from books which contain the experience of wiser men. On the other hand, there are those who would rejoice at the idea of such a thing, and would avail themselves of every opportunity to instruct their children in that calling which is not only healthy and pleasant, but honorable for all classes of mankind.

The prince in all his costly array, is really not so independent as the man who has a good farm, free from debt, and especially if he has an interest in the business, and understands it, as he will do if he has enjoyed the privileges of an agricultural school in his boyhood. Then let us no longer neglect them, but have some of the millions which are aunually spent in uselessness, to establish and support these schools which we so much need, and thereby promote the prosperity and welfare of the farmer.

E. P. L.

Ware, Jan., 1862.

THE TRAINING OF HOME CONVERSATION.—To subordinate home training to school training, or intermit the former in favor of the latter, is a most palpable and ruinous mistake. It is bad even in an intellectual point of view. To say nothing of other disadvantages, it deprives girls of the best opportunities they can ever have of learning that most feminine, most beautiful of all accomplishments—the noble art of conversation. For conversation is an art as well as a gift. It is learned best by familiar intercourse between young and old, in the leisure and unreserve of the evening social circle. But when young girls are banished from this circle by the pressure of school tasks, talking with their school-mates till they "come out" into society, and then monopolized entirely by young persons of their own age, they easily learn to mistake chatter for conversation, and "small talk" becomes, for life, their only medium of exchange. Hence, with all the intellectual training of the day, there never was a greater dearth of intellectual conversation.—*Ohio Farmer.*

He that puts a Bible into the hands of a child, gives him more than a kingdom, for it gives him a key to the kingdom of heaven.—*Dr. Buchanan.*

For the New England Farmer.

SOUTHERN ILLINOIS.

MR. EDITOR:—I wish to call the attention of those desirous of settling in the West, to the superior advantages of Southern Illinois, as regards location, facilities for market, soil, productions, climate, &c.

The location of Southern Illinois, immediately above the confluence of the Ohio and Mississippi rivers, and the 500 miles of navigable waters on the south, west and east boundaries, give to this part of the State great natural advantages; and these, with its railroads passing through from north to south, and from east to west, afford extraordinary facilities for transporting its surplus products to market. Other roads, now in process of construction, will further increase these facilities.

The farmer or trader wishing to reach the best market, is here, either by steamboat or railroad, within six days of New Orleans, thirty-six hours of St. Louis, and three days of Chicago, Louisville, or Cincinnati, by freight trains; by passenger or express, the time is much shorter.

The soil in this region, especially in the timbered lands, is unsurpassed in productiveness. It is light and easily cultivated, being almost entirely free from stones and other obstructions (where the stumps are out;) the subsoil is of great depth and richness, capable of receiving and retaining moisture for a long time, and as a consequence, the crops are not often injured by droughts. Winter wheat is a staple crop; with good culture the yield is twenty to forty bushels per acre. Oats, rye, barley, buckwheat, millet, red clover and timothy are excellent crops. Indian corn is grown abundantly, and with good culture, yields from forty to eighty bushels per acre. Cotton is grown in the southern counties, but for domestic use only. Sweet potatoes yield abundantly here. Apples do well, and are a certain crop in almost any situation; many of the most popular varieties grow much larger and finer here than in the Eastern States.

This is the true home of the peach, which for size and flavor is unsurpassed; the most elevated lands being the most desirable for peach orchards, on account of spring frosts. There has not been an entire failure of the peach crop for twenty years, on elevated lands; on medium and low grounds, only about three crops in five years can be expected. Pears, cherries, plums and quinces do well. Much of the land is well adapted to the grape, as the thousands of thrifty-growing, wild grape-vines will testify. In the fifteen southern counties of this State, there is but little prairie; the surface in some parts is hilly and broken, but generally agreeably undulating. Swamps are not found, except in the extreme south, on the low grounds near the Ohio and Mississippi rivers.

This portion of the State is covered with a moderate growth of red, burr, white, black and post oak; poplar, hickory, ash, gum, pecan, sugar maple, walnut, hackberry, cherry, &c., with an undergrowth of dog-wood, sassafras, pawpaw, red bud, &c., &c. Good water is generally found by digging from twenty to forty feet.

In the hilly country, good springs are numerous. Where good springs are not convenient, cisterns can be cheaply made, and furnish good, wholesome water.

The climate is temperate; there is neither the protracted cold of the North, nor the sultry heat of the South. The thermometer, in the shade, rarely indicates a higher degree of heat than 90°, or a lower than 10° above zero. We have had no weather as yet, this winter, colder than 10° above zero, and last winter the temperature was not lower than 10° above zero, except once or twice, and then but for a few hours. We have had two little flurries of snow this winter, which melted off almost as fast as it fell,—so you see we have no use for sleighs here. The ground is generally free from frost by the first of March, and in good plowing condition in the same month. Farmers are sometimes seen plowing in December or February.

The direct communication we have by railroad with Chicago, Milwaukie, Galena, Dubuque, Bloomington, and other northern towns, makes this a very desirable place for gardening, which bids fair to become an extensive business here, as also the growing of small fruits, such as strawberries, gooseberries, &c. We can have vegetables and fruits ready for market from four to six weeks earlier than the Chicagoans.

Plenty of good land can be had here at from $5 to $50 per acre, according to location and improvements. Pomologically yours,

AN EGYPTIAN.

Union Co., Ill., January, 1862.

For the New England Farmer.

MOVABLE COMB HIVES.

A RELIABLE GUIDE FOR STRAIGHT COMBS WANTED.

Although these hives are a great acquisition to very many bee-keepers, they are yet deficient in one important particular. No one seems to have discovered a guide for producing straight combs that can be depended on in all cases. The cross-bar hive that has strips of lath sharpened on the lower edge, like a broad knife, and passing across the top, just the right distance apart, has been warranted to produce all straight combs. Yet some swarms are perverse enough to work their combs across these bars. The angular edge on the under side of the top bar, of nearly all the movable comb hives that I have seen, will, if sawed smooth, in most cases, be followed by the bees; but a great many swarms pay no regard to any of these rules, and make their combs in all possible directions across the hive, and render it of no more value as a movable comb hive, than a flour barrel. The edge of a narrow strip of tin, attached to the frame of Underhill's hive, that promised so much, has failed to produce the results anticipated.

The dispute between Mr. Brackett and Mr. Kidder, relative to what I said in the *Rural New-Yorker* about movable combs, proved nothing as to which was the better guide of the two, Langstroth or Kidder. What I said was not given quite correctly. It was my neighbors, who had put bees into these hives, when "two-thirds of the swarms worked crooked." I think I stated at that time, that I could manage to get nearly all straight combs. Subsequent experience has proved that I was correct. I have not failed with one in fifty. Any one understanding his business, and disposed to take the trouble, would succeed equally well. But a great many that keep bees are not sufficient-

ly posted in their habits; others have not the necessary time to devote to them the necesary care; some are too indolent to take the pains needed, and more will not have the means at hand—empty combs, or dividing boards—to secure them. Hence the importance of some method that will induce the bees to go right every time, without our supervision. To us who now manage to get straight combs, it would be an acquisition; we cannot as it is, do it without trouble; it would often be a great convenience to put bees into a hive wholly empty.

Now let Mr. Kidder give us a reliable guide for straight combs; one that everybody can prove true; not like the humbug of a swarm being made to store 300 pounds in one season. Or let Mr. Langstroth, Harbison, Underhill, Flanders, any one of the host of the patentees of movable comb hives, exercise their ingenuity on this point, and give us the desired improvement. Although a patent is repugnant to my feelings in a bee-yard, I would tolerate one more in this case, if we cannot have the improvement without. Variations of the movable comb hive are unnecessary to multiply further. Let us have something in the line needed. M. QUINBY.

St. Johnsville, N. Y., 1862.

For the New England Farmer.

MANUAL OF AGRICULTURE.

Progress in the Art—State and County Societies—the Agricultural Press—Farmers' Clubs—Agricultural Libraries—Manual of Agriculture.

MY DEAR SIR:—It is always a pleasure to chronicle the progress of improvement in whatever form it may present itself, and more especially when it leads to a more thorough and more general development of the agriculture of the country. Since the commencement of the present century, there have been many landmarks established to show that mind, as well as bodily toil, were essential to the full, successful cultivation of the earth, and the collateral arts. Earliest among these was the formation of Agricultural Societies. It was mind; deliberate, active mind, was the originator of these. There are many now living who treasure in remembrance the earliest buddings of the earliest efforts in behalf of these institutions. Such can well remember how great a curiosity they awakened in the minds of some, as also the bitter opposition they met with in the minds of others, and among farmers, too. But early discouragements, in their formation, yielded like the ice before the cheering sunbeams; so that now we have a United States Agricultural Society, State Societies in a majority of the States in the Union, County and Town Societies almost without number. Had the originator of the first Society had an assurance of the number of such Societies half a century would bring forth, and the amount of usefulness that would follow in their train, what a noble impulse it would have given to his labors!

Next in the train came the Agricultural Press, the engine to disseminate the knowledge that was accumulating through the agency of associated effort at improved husbandry. Those who recollect the birthday of the old *New England Farmer*, can remember, too, the distrust with which the majority of farmers looked upon it. They did not want newspaper knowledge, for they knew better than the papers did. This dream, too, has passed away. The *New England Farmer* lives on, a life of usefulness and honor, and has begot many sons and daughters; so that now the agricultural press has become a powerful press, not only in numbers, but in influence; and instead of being looked upon with jealousy, as the innovator of strange and fallacious doctrines, it is deemed a household necessity in every farmer's dwelling, especially if that farmer loves and respects his calling. Their number is now legion—their influence is inestimable.

The establishment of "Farmers' Clubs" in towns and neighborhoods, where mind meets to hold intercourse with congenial mind, formed another important era in agricultural progress. The advantages that may result from these institutions are too many for enumeration, and cannot be too highly appreciated.

In connection with Farmers' Clubs, the establishment of Agricultural Libraries marks a proud era in agricultural progress. It does not require the memory of great age to go back to the period when such libraries were a thing unthought of, and had their existence occupied a place in the farmer's mind, it would have been a difficult task to have procured suitable books to place on their shelves. Now, such books are becoming abundant, as libraries are springing up everywhere.*

But all these things have occurred for the benefit of men—those engaged, or just about being engaged, in the practical duties of active life. They, ever hopeful and young, may, to be sure, have been to some extent benefited by them. But their wants were not met. Their case, of a certainty, has been long considered, but delay succeeded delay in acting upon its claims. At last a star, bright and beautiful, arises upon them, and it shines for all. The rich and the poor can meet together, and study and admire its beautiful light.

I consider the *Manual of Agriculture*, prepared by Messrs. EMERSON and FLINT, one of the best works on Agriculture extant, and for the purpose for which it is designed, as the very best. And I hail its introduction into our common schools as the introduction of the golden age of agricultural progress. It is a matter of proud congratulation that its introduction has been so successful. May it become universal. It has been a favorite idea with me, for a long time, that the study of Agriculture should have a place in our common schools, and I rejoice that this idea is so far approaching a realization. But one thing more is needful. We must have teachers adapted to the work, in order to make it successful. Our Legislature, in the name of the people, should legalize the study, and our Normal Schools must educate their teachers to carry out the work.

What a beautiful era it will be, when the arts of rural life are taught in all our schools by thorough and efficient teachers; when every school-house will have its grounds cultivated by the hands of enthusiastic pupils, and when the library and the cabinet shall be classed among the essentials of school-house furniture! W. BACON.

Richmond, Jan., 1862.

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* In a communication from J. Raynolds, Esq., of Concord, dated early in October last, he informs me that previous to that time he had established nearly two hundred Agricultural Libraries in Massachusetts. I hope and believe the number has been liberally increased since that time. His Catalogue embraces a valuable list of books.

For the New England Farmer.

THE WINTER FIRESIDE.

Within a few years the farmer's fireside has undergone a marked change, as we all know. The old-fashioned open fire of logs, or blazing fagots, has come to be too expensive a luxury, except in backwoods settlements, where wood is the cheapest commodity.

But the question is, whether it was the most profitable way of passing winter evenings, for the household to cluster, as they used to, about that big, generous fire; the younger members whiling away the hours with reveries, and jokes, and story-telling, and the old folks gradually subsiding into the embrace of "tired Nature's sweet restorer." To be sure, those old fireside scenes are treasured among our pleasantest memories—and many a man misses now the glowing hearth and dancing flames that used to make his face shine so, and his heart leap when a boy. But on the other hand, more than one day-dreamer contracted the habit of dreaming with his eyes open, and building air-castles and the like, at that very fireside, where the singing of the tea-kettle sounded like a syren's song, and the embers and flames assumed as many grotesque shapes as his musings in the fire. No doubt, bright ideas were kindled from those live coals, and occasionally a stupendous scheme rose like the Phœnix, from ashes. Yet, after all, was not that old-fashioned fireplace most favorable to dream-life, in more senses than one, and was the home circle any more one bright "golden chain," binding heart to heart, than now?

There was, I admit, a large circulation of fresh air through the sitting apartment then—especially by the doors and windows, and corners of the room remote from the cosy chimney-corner—and plenty of exercise, too, in preparing and bringing in wood to supply that generous fire. But when a family gets together for a winter's evening, they can do better than gather like a flock of swallows about a chimney, or as a company of fire-worshippers, that we read of. If the room be comfortably warm—no matter by what means the warmth is generated, provided it be healthful, economical and safe—whether from an open or close fire, a furnace, or pipe from an adjoining apartment.

In the days of our forefathers, they depended on the open fire-place, we know, to help illuminate, as well as heat the room; and how we loved to, when children, watch our own shadows, looming up so queer and tall, here and there, as thrown, by the big, blazing fire, upon the wall opposite. But in these days of "burning fluid" and kerosene oil, every farmer's sitting-room is brighter than ever fire-light made it. And now that the temptation of the old, open fire-place is gone, we must look around and find some good substitute. Why not gather around the table, all so cheerful with the rays of that bright lamp in the centre; and while mother and daughters are sewing, let the father and sons be reading, or drafting plans of operations for the next season? At any rate, let some head-work be going on as busily as those nimble fingers on the other side are plying the needle-work. Perhaps there is a piano in the house—for many farmers are introducing this article among their household furniture—or, at least, the melodeon, which, being much cheaper, is likely to be more common. And perhaps the instrument is not left alone in the cold, unfrequented "best room;" but allowed to take its place in the living-room through the winter, and help on domestic harmony with its "concord of sweet sounds." I, personally, have such a passion for music that I dare not enlarge upon the subject here, for fear I should spin out this communication *ad infinitum*. Only let me throw out this closing hint, for relieving the monotony of a winter evening; let every farmer that has the material, encourage and cultivate *music* at home. No matter if it lulls one after another to sleep; it will keep as many more wide-awake and out of mischief.

W. E. B.

Longmeadow, Jan., 1862.

EXTRACTS AND REPLIES.

USE OF RAW HIDE.

In the last number of the *Farmer* you say that skins (meaning hides) may be tanned by spreading "powdered alum *or* soft soap on the flesh side," &c. Now let me guess that soft soap will take the hair from the hide or skin, if applied on the flesh side. Alum is of a different nature, and will act as an astringent, or tan, and with common salt will preserve the raw hide, but soap without the alum or salt, will surely, if applied in quantities to preserve the hide from taint or decomposition, take the hair off. If the object is to take off the hair before using the alum and salt, it would answer the same purpose as lime—but soft soap, without any other ingredient, will start the hair from the hide or skin.

A TANNER.

Rockingham, Vt., Jan. 13, 1862.

REMARKS.—When a boy, at home on the farm, we used to find amusement and profit among the grey squirrels and partridges, "when they were ripe;" their flesh made an excellent breakfast, and the skins of the former were wrought into ear-pieces for caps, or into caps themselves. Our practice was, to take off the skins carefully and spread them, flesh side down, on the top of a cask of soft soap, being careful that the soap should not touch the upper part of the skin. In about ten or twelve days they were taken out, the soap washed off, and the skins drawn over a board or back of an old chair until they were as "soft as silk." We have no recollection of ever spoiling one by this practice. We have no doubt that considerable care must be observed in the process. The soap was made in the family, and might not have been as strong as is sometimes made. But of this we know nothing.

We sincerely thank our correspondent for his kind words of approbation of the *Farmer*, contained in a private note.

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COWS EATING LITTER FROM MANURE HEAP.

I wish to inquire of you, or of any who can tell me, through the *Farmer*, the cause of my cows eating the straw and litter from the heap of horse manure in preference to good clean fodder? Thinking it might be for the want of a sufficient

supply of salt, I placed it by them, but still they root over the manure like swine, and eat every particle of litter they can find.

Is it an injury to them, and if so, what will stop the filthy habit? Please give me your opinion, and oblige A SUBSCRIBER.

Sturbridge, Jan., 1862.

—

WATER CISTERNS.

You occasionally speak of water cisterns in the *Farmer*. They ought to receive more attention. Our mode of constructing them is to make the top round and the bottom run down to a point like the small end of a hen's egg. The process is as follows:—Dig some seven feet below the frost for the bottom. The part of the country, and the location of the cistern must guide as to frost. Dig through the frost and make a circle 12 inches all around the cistern hole, and then start the hole down some two feet and put on the top; use flagging stone by all means, if they can be had from seven to ten cents per foot, surface measure. Leave the hole open, and then finish digging the cistern. When dug in the proper shape, take two barrels of water cement, and mix one part of cement to three parts of sand, which must be mixed as it is spread, or it will get hard. The mason must use some judgment, and temper the cement according to its strength. Give it two coats of cement, and for a finishing touch, mix some thin to use as a wash; give the whole one or two coats.

We build them here on leachy and gravelly soil, and the water in them, from November to the last of May, is as good as any well water. They should be cleansed out once a year in the fall, and always built so that frost will not reach them.

My estimate for building one of these cisterns is as follows:

For digging	$2,00
Stone covering	8,10
Mason work	3,00
Two bbls. cement	4,00
	$17,10

Dalton, Jan., 1862. T. S. WILSON.

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FINE PIGS.

I noticed at the Essex Cattle Fair held at South Danvers, in 1860, a Mackay breeding sow and nine pigs, five weeks old, of a litter of sixteen of the somewhat noted stock of Byron Goodell, of that town. Upon inquiry, I found they were kept for breeders, except four, which were taken at that age by different individuals of that town, and kept until their average age was fourteen months and three weeks, then slaughtered, and weighed in the aggregate, including fat, twenty one hundred and four pounds! Some of them not weighing over one hundred and fifty pounds in the spring, being kept light through the winter. These were all fit for the market when not weighing over two hundred pounds, dressed. This is a general characteristic of the breed. One of the four, fatted by Mr. Samuel Chandler, weighed six hundred and nineteen, beside the fat. The butcher said it was the "thinnest rind" hog he had slaughtered for the season. These were fatted on grain, meal and shorts. The same sow had another litter last April, of eighteen, which were kept for breeders, and will now weigh from three hundred and fifty to four hundred pounds each!

A NUMBER ONE RAT TRAP.

As good a rat trap as I have ever used may be made by taking a piece of 3 by 4 scantling, say two feet long and about two or three inches from each end, and at equal distance from the sides bore two holes, and insert in an exactly perpendicular position two pieces of broom handle or other round stick, and across the centre cut a place deep enough to admit a bit of shingle for a pan. Nail a piece of board a few inches wide on each side, a hole being cut in one of them for the shank of the pan. Next take a piece of scantling of the same length as the other, but a little less in width, so as to drop readily between the side-boards on the first, and bore two holes through it large enough and in a position to play freely on the uprights; fasten two cords to this and attach them to a roll made to rest on the uprights. To an arm projecting a foot from the centre of the roll attach another cord, and tie the other end to the centre of a bit of wood fitted to notches in the shank of the pan and the side-board in the form of a "figure four," another notch in the shank catching on the inner side of the board. Now turn the roll a few times so as to raise the upper scantling a few inches and apply the catch, and you have a trap which can remain "set" six months, if you please, without weakening any springs, and being open at both ends, is not likely to frighten the game. WM. F. BASSETT.

Ashfield, Jan., 1862.

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SEEDING GRASS LAND IN THE SPRING.

In the *Farmer* of Jan. 11, I noticed an inquiry whether herdsgrass and clover are profitable if sowed early in the spring. In the spring of 1860, I sowed four acres as soon as the frost was out of the ground, on land fitted for mowing the fall before, sowed eight quarts of herdsgrass and five pounds clover seed to the acre, and cut the same year two tons of clean hay, per acre. In 1861, I cut rather more than in 1860. In April, 1861, seeded three and one-half acres, and put on one-half bushel herdsgrass seed, per acre; the result was not as favorable for spring seeding, owing, I think, to its being so wet through the following month of May. The result was twenty-five hundred of hay to the acre. I fitted four acres the past fall for seeding next spring, and I shall practice this way of seeding as long as the result proves as favorable as it has the past two years.

Waterbury, Vt., Jan., 1862. S. F.

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FOUL IN THE FOOT.

Can you, or any of your subscribers, inform me which is the best way to cure "foul in the foot" in cattle. I. F.

Pittsfield, Jan., 1862.

REMARKS.—See that the feet are kept clean, and try them by pressure with the thumb and finger. If some spots are found very tender, open them so as to let the corrupted matter pass out. Then wash the feet once or twice a day in a solution of blue vitriol. Keep everything clean about the animals, and see that they stand upon a smooth floor—that is, a floor that is not worn into ridges, or that has holes in it.

QUESTIONS AS TO SHEEP.

1. What aged wethers are best to buy in spring to turn out through the summer for mutton?
2. What breed is best?
3. How much will they gain in the season with good feed?
4. How much will the May and November prices vary, per pound, live weight?
5. How many can be kept well on the feed of one cow, or how many to the cow?

Hardwick, Jan., 1862. INQUIRER.

REMARKS.—We hope that friend ELLIOTT, of Keene, GEORGE CAMPBELL, of Westminster, or some other person who understands this matter, will answer these questions.

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AN UNMANNERLY PIG.

I have three Chester county sows with pig, which are kept together; one of them is continually rooting the others with her nose, to their great annoyance and injury. I have given her salt, bone meal, and various other foods, but fail to check it. Can any of your readers inform me of the cause and the remedy? J. S. IVES.

Salem, 1862.

REMARKS.—Place her in a pen by herself, friend Ives, for a few days, and take away a portion of her food, and if she is not more respectful in her "conductions," we shall be mistaken.

THE ARMY TELEGRAPH.

The army telegraph now consists of over one thousand miles of wire stretched through the different camps, from the headquarters of General Hooker on the left, running toward the right wing till it reaches Hancock, Md. One hundred and ten operators are now in the employ of the government. Mr. Eckert, the assistant superintendent in charge of this department, has run a separate line to the headquarters of each general commanding a division.

For instance, General McClellan can sit at the table in his private house, and talk to the different Generals, all at one and the same time, and independent of one another. When any division moves, the line can also be extended, as each division has a corps of builders, and a supply of wires poles and insulators always ready.

Large wagons have been provided for the operators and their batteries to travel in, with sleeping apartments, tents, equipage and everything necessary, thus making the telegraphic department the most efficient and thorough branch in the whole army; and in connection with the balloon corps of Professor Lowe, will, should the army move, prove incalculable in detecting the operations of the enemy, and the prompt transmission of their movements to headquarters, and the conveyance of orders to different divisions and brigades.

So effectual are the means that have been taken to prevent accident and delay, that it will be impossible for more than one out of a dozen lines to fail at once. Strong guards will be kept all along the wires wherever they cross over exposed country, as the army moves, to prevent obstruction in any form, and to prevent an opportunity of stealing information from the wires. Never before, in the history of the world, has science been enabled to reduce to such a mathemetical certainty and reliability, the use of the telegraph and ballooning as it has been brought to under the management of Professor Lowe, Mr. A. P. Stager, and Mr. Eckert.—*Philadelphia Inquirer.*

INSECTS INJURIOUS TO VEGETATION.

Through the kind attention of the editor, CHARLES L. FLINT, Esq., Secretary of the State Board of Agriculture, we have before us a copy of the new edition of Harris' Treatise on some of the Insects of Massachusetts which are Injurious to Vegetation. This was ordered to be printed by a resolution of the Legislature of 1859, and with suitable additions and illustrations. The care of the execution of this work was entrusted to Mr. Flint, and well and faithfully has he discharged the task. The work does as much credit to the arts, as to the science to which it is devoted.

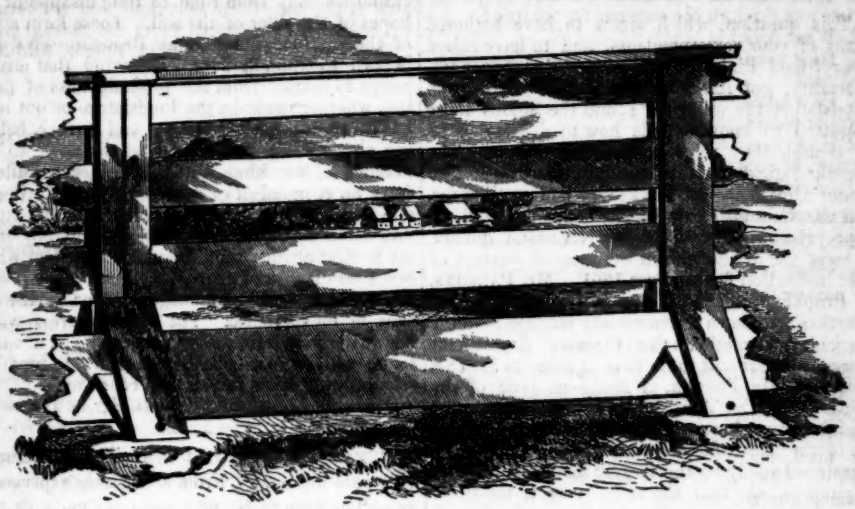
In acknowledging the aid which he has received from others, the editor says:

"The drawings for the steel plates were made by Mr. ANTOINE SONREL; those for the wood cuts by the Messrs. SONREL and J. BURCKHARDT. The engraving and coloring of the steel plates is the work of Mr. JOHN H. RICHARD; the engraving on wood, that of Mr. HENRY MARSH. The printing has been done by Messrs. WELCH, BIGELOW & Co., of the University Press, Cambridge."

It is as much pleasure to us to record the names of persons who have exhibited such rare skill in their various professions, as it is to accord praise to the author of a book of undoubted merit. With our people, mechanical skill and scientific research keep pretty even pace with the progress of literary acquirements. It is this, in considerable degree, that keeps society evenly balanced, and makes a people strong.

The book is a credit to old Massachusetts, and will stand as one of numerous evidences of her liberality and enlightened discernment. The Legislature that ordered it, directed that a copy of the work should be sent to each town in the State,—so that provision is made for all who desire it to have access to the work.

If we are pleased with one part more than another, of this book, it is with some of the *wood cuts*. They surpass anything of the kind we have before seen, in beauty and elegance of execution. It seems as though one could touch the wing of the *Butterfly* on page 293, and rob it of some of its down; and so of cuts on pages 223, 410, and indeed many others. We have long and often referred to the former edition of the work, in our labors as editor and farmer, and shall continue to do so with increased pleasure, now that so many of the insects spoken of are made plain to the eye as we study their habits.



For the New England Farmer.

SMITH'S IMPROVED FARM FENCES, PATENTED OCT. 11, 1859.

NUMBER ONE.

Any field stones, of suitable size, that can be easily drilled, are used for the foundation of these fences. Granite cobble stones, so common in New England, are among the best.

The posts, which are two inches thick, and from four to six inches wide, are fastened to the stones, and the fence is kept in position by a bolt which holds the foot of the post, and by braces, about twenty inches long, one on each side, nailed at the top to the post, and at the bottom held firmly to the stone, by loops of strong wire, boiled in linseed oil to prevent them from rusting. The posts are *grooved* on the sides to which the boards are nailed, with a plane which cuts three or four grooves at once, to prevent the accumulation of moisture and consequent decay.

The braces are one inch thick and four inches wide, and sound hemlock is good enough for both posts and braces.

The advantages claimed for this fence are:

1. Simplicity. Almost any farmer, with a little instruction and experience, can build it.

2. It is *straight*. There is no zigzag about it. New York, alone. loses 300,000 acres of land by crooked fences.

3. It is *cheap*. Having stones convenient for the foundation, it need to cost but little more than the common post and board fence; and the arrangements of the posts and braces is adapted to nearly all the different kinds of yard and garden fences in use.

4. It is very *firm*. When well made, few fences are as much so, and no extra posts are necessary for gates.

5. It covers but little land; not more than one-twelvth as much as a wall three feet in width, and the Virginia fence puts six times as much beyond the reach of the plow.

6. It can be easily built over ledges, the solid rock of which affords the best foundation.

7. It will resist ordinary currents of water.

8. It will stand on *heaving soils*. For these valuable lands, the importance of this fence can hardly be estimated. Where wall fences are tumbled about, and posts are thrown out by the frost, it will stand, and stand straight and stand firm

9. It is *very durable*. No part but the stone foundation touches the ground, and with the grooved posts or cleats, no part of it is more exposed to decay than the boards ordinarily are upon a barn. thus effecting an immense saving in the cost of rebuilding and repairs. The loss to our farmers from fence posts decaying in the ground, and being thrown out by the frost, is almost incalculable.

REMARKS.—We are so much pleased with a sample of this fence, put upon our land by Mr. SMITH, last fall, that we are preparing materials this winter to extend it, in preference to any other fence we have seen. It seems to us to be preferable to any other wooden permanent fence in almost every particular, and we cannot see why one well made and set, and kept constantly covered with whitewash, should not last a hundred years.

In a week or two we shall give another pattern of fence, quite like this, but cheaply arranged so as to be laid down in the winter when set on lands that are subject to being flowed. Both samples may be seen at Concord, Mass.

HORSE POWER.—The power of a horse is understood to be that which will elevate a weight of 33,000 pounds the height of one foot in a minute of time, equal to about 90 pounds at the rate of four miles an hour.

For the New England Farmer.

"DOES FARMING PAY?"

This question, which seems to have bothered many of your correspondents, and to have raised your friend Pinkham to a sort of newspaper immortality, got itself incidentally into our State Legislature the other day; and the Solons there appeared to know as little how to dispose of it, as though they were agricultural editors. The "crooked stick" was introduced in this wise: The State Alms-house at Tewksbury had applied for, and the Committee on Finance had reported, an appropriation of some thirteen thousand dollars, to meet the deficiencies in the account current of that institution for the year 1861. Mr. PARSONS, of Brookline, raised the question, whether the institution had been economically managed—more particularly whether the *farming* department thereof did not cost more than it came to? This called up Mr. FOSTER, of Andover, (one of the Trustees of the Alms-house,) who, in a very straight-forward speech, explained that the expenses of the institution beyond the estimates were occasioned solely by the largely increased number of paupers, and that the actual cost to the State for each pauper sent to Tewksbury, (reckoning all the expenses of the institution,) was only a fraction over and above ninety-eight cents per week. This, I think, establishes the fact that the Tewksbury concern is a pretty cheap boarding-house; and whatever difference of opinion may exist as to the general utility of State alms-houses, a want of economy cannot in fairness be charged to the case in question.

In the course of his remarks, Mr. PARSONS held that it was cheaper to purchase milk at four cents per quart, than to produce it by keeping cows at the Alms-house. I understood him to base this remark on the results of his own farming experience. Mr. FOSTER replied, that the milk produced at the Alms-house cost the State but a fraction over three cents per quart; and when it is considered that this milk was the product of cows that *shed rain*, and that these cows must have produced at the same time a large quantity of manure, the question of cheapness in the two cases is pretty well disposed of. At any rate, from the attention I have been able to give the subject, I am satisfied that it is better for any person having the means of keeping cows, to produce his own milk, rather than purchase it at even two cents per quart.

Mr. PARSONS also stated that it cost more to purchase food to fatten swine, than to purchase pork. This may be true, under certain circumstances, abstractly considered; but practically, the question stands in the same category with other farming interests. When it is considered how much about a farm, (and especially about a large alms-house,) otherwise wasted, or of but little account, may be applied to the keeping of swine, and how much manure these animals may assist in manufacturing, I undertake to say that no agriculturist can afford to dispense with the raising of his own pork.

That farming does "pay," I think is fully established by the fact that farmers seldom fail in business, or depreciate in wealth. But I go further, and maintain that *every branch* of farming "pays" in the long run, if managed with good judgment and sound economy. Crops may fail, cattle may die, pork may be low in the market, all sorts of casualties may from time to time disappoint the hopes of the tiller of the soil. These form a part of the "accidents" which, as Brownson says, man is born to triumph over. Believing that any attempt to detract from the profitableness of farming, whether made in the Legislature or out of it, has a mischievous tendency; and further, believing that giving agricultural employment to the inmates of our alms-houses, whether considered from an economical or sanitary point of view, is one of the wisest and most philanthropic features now attached to those institutions, I hereby enter my protest against that flippant dogmatism which seeks to dispose of grave questions by the results of single cases of bad management, or by the lessons of inexperience. The great interest which lies at the foundation of all others, ought not thus to be made a foot-ball for amateurs in practical science, or egotists in practical economy.

A LOOKER ON AT THE STATE HOUSE.

REMARKS.—If reported correctly, Mr. Parsons' views are unsound. From a life-long experience, as well as from facts and figures, we know that he cannot sustain the position he has assumed.

For the New England Farmer.

WHEAT BRAN AS A FERTILIZER.

MR. EDITOR:—I saw a communication from "J. S. S." in the monthly *Farmer* for June, 1860, saying he was using wheat bran as a fertilizer for corn, and his method of applying it, and a request that those who tried it, would note the result and report—I suppose he meant—to the *N. E. Farmer*. I took it for granted that he would do what he requested others to, and have been looking with some degree of interest for his report, but not having seen any from him, I have concluded his success was not worth reporting. I was pleased to see a statement from "T. G. H.," in a late *Farmer*, of his experience with the bran for corn; that he found it to be nearly equal to superphosphate, and less expensive. That being the fact, it stands all farmers in hand to make a liberal use of it. But his experience does not correspond with mine. I was induced, through the recommendation of a friend, to make use of the bran for potatoes. I applied it, a single handful to a hill, and covered it with soil before applying, as directed. The truth was, I had but very little faith in it, that it would be any better than the same quantity of sawdust, and that sawdust was of little or no value; the result proved it to be so. I thought if like would produce like, it must be good for wheat. Accordingly I applied it broadcast at the rate of 300 pounds per acre, and harrowed in with my wheat; the result about the same as with my potatoes. I have concluded that the opinion of my better half was correct, that I had better give the bran to the cows, and let them compost it before using it for manure. J. P.

South Hampton, N. H., Jan. 24, 1862.

REMARKS.—Send the article you speak of in your private note.

LEGISLATIVE AGRICULTURAL SOCIETY.

[Reported for the Farmer by D. W. Lothrop.]

The third meeting of the series was held at the *Representatives' Hall*, on Monday evening last, and the subject under consideration was—*Crops, and the Economy and Cost of Cultivation.* Dr. G. B. Loring, of Salem, was invited to preside.

He said the subject opened a wide field for discussion, and involved the whole business of agriculture. Everything coming from the land, commerce, manufactures, and all vocations, depend upon its successful culture. In respect to the profit and economy of the various crops, there seemed to be no law for the different localities of the State. The farmers of Berkshire think the small grains the most profitable, and those of Essex would say the root crops were the most economical. Then, again, others advocate the corn, hay and fruit crops. In fact, it is impossible to tell what is the most profitable. A contest in this State has been waged between grass and root crops, but has not been decided. What does it cost to raise an acre of corn? One says $100, another $30, &c. But the cost of a crop is not always an index of the benefit of such crop, for the soil and mode of cultivation affect the former, and home consumption or markets the latter. Corn at 25 bushels to the acre was of doubtful profit, but at 100 bushels to the acre, at 35 cents per bushel, it would pay. Generally speaking, Dr. L. thought there was no unprofitable crop in New England, but very much depended upon the *skill of the cultivator.* The corn crop can always be made profitable, and skill applied to the raising of all farm products will meet its reward. The English think turnips the most profitable, as they are fed down on the land in the autumn and winter by sheep, whose droppings easily enrich the soil. In this connection Dr. L. spoke of English fallows, but there is no necessity of them here. Corn, potatoes and grass are staple crops, and in their cultivation there is no loss. But shall we introduce new ones? He had great faith in root crops—not that they, like patent pills, were a remedy for everything—but they greatly improve the land. He instanced carrots, of which he could raise 35 tons to the acre, and of Swedes 18 to 22. These he compared with the products of corn and hay, and concluded that as they were easy of culture, and useful as an auxiliary, farmers should not neglect them. In conclusion, he said he had touched upon many topics of discussion, and hoped that some of the following speakers might disagree with him.

Mr. Stedman, of Chicopee, inquired if root crops were profitable to the chairman in his own case.

Dr. Loring said he did not intend to say that they were so much so as with some others.

Mr. Stedman then spoke of the diversity of experience in regard to carrots. From 15 to 18 tons per acre could be raised, and at from 5 to 8 cents per bushel. Generally they were more profitable to sell than to feed. Mangold wurtzels could be raised at the rate of 30 tons to the acre. He thought root crops were increasing, and it was well, as they tend to cleanse the soil. Corn is a staple, and for a single crop it is the best.

Dr. Loring said the yield of carrots differs very much from different modes of culture. He though his statements were no exaggeration.

Mr. Howard, of the *Boston Cultivator*, being called upon, said he had not thought much upon the subject, but where much stock is kept, he believed it good economy to use root crops as an auxiliary in feeding. Turnips do not flourish as well here as in England, neither can we feed them with that advantage. The English feed them off by turning in sheep during the winter. But our winters are too severe for this procedure. He alluded, however, to a gentleman in Saratoga county, N. Y., who fed his sheep in this manner with satisfaction, but the speaker had his doubts about it. The relative value of different crops was a desideratum, and we ought to have a fund to establish certain facts in the feeding of crops. Milk from carrots is very good, and the best for butter.

Mr. Stedman inquired at what distance carrots should be grown.

Dr. Loring replied ten or eleven inches apart. He commended the orange carrot, with a heavy blunt root. The wheel hoe is used in Essex county for tilling this crop, as well as for onions.

Mr. Stone, of Hull, inquired what root would produce the most milk.

Mr. Stedman replied the mangold wurtzel.

Dr. Loring. Whatever will produce food will produce milk, though corn was regarded as a fattening principle. Mangolds give the best milk, but the Swedes are better for fattening. Daniel Webster used salt hay and turnips for fattening cattle in the winter, with an addition of meal. Good English hay and corn meal are useful for milk.

Mr. McLaughlin, of Duxbury, was much pleased with roots. Carrots were good for the horse, and they produced richer milk from the cow than turnips. He feeds all his cattle daily from roots, and he finds their growth improves his land.

Dr. Loring said he had computed the value of the various grain crops, and referred to a lot of land of 15 acres which he had prepared, concluding that if planted to corn rather than barley, the difference in favor of the former would be $250.

Mr. Davis, of Plymouth, said the solution of some of these questions depended upon the amount of land available, and remarked that the

cost of crops was very difficult to ascertain, and cited Mr. Colman in point. There was much vagueness about crops, and he hoped that farmers would give us an accurate account of the net profits of an acre of corn. We want all the facts about it. In England they knew more about their crops than we do here. We need experiments. As to roots, he said he could raise turnips and mangold wurtzels better than any other crop. The mangolds grow well, and at half the cost of the carrot crop, and he had grown 95 tons upon three acres. Yet Mr. Allen—the reputed father of farming in his county—thought root-raising a piece of folly. Mr. Davis said he prepared his land for the turnip crop from the first to the tenth of June, and could raise from 800 to 900 bushels per acre. If turnips make more milk, it is not so good as from the mangold. He again requested gentlemen to give to him an actual account of the cost of any crop.

Mr. GEARY, of Oregon, being called upon by the chair to offer a few remarks, said he was not a practical farmer, but was conversant with that country, though its aspects were difficult to describe. Oregon was five degrees north of us, yet the winters were milder than in Massachusetts, and farmers frequently marked their cattle and let them provide for themselves during this season. The valleys, and lofty mountains perpetually capped with snow, were there very beautiful to behold. While the winters were milder the summers were not so hot as with us. The cereals are there produced in great quantity, and wheat grows very well. It is a singular fact that there is no lime in the soil, yet their eggs have shells and men grow with bones! The fine silex of the soil makes the wheat very strong, while some of the heads measure from 6 to 8 inches in length. The product was about 20 bushels to the acre; had seen 50. He had a piece of land into which he harrowed wheat in February, which produced from year to year without manure, 40, 35, 40 and 45 bushels in succession. Wheat is best when sown in June, and gathered the next year, as it makes the best flour. Orchards grew very rapidly there, and produced fruit five years from the bud. Pears and plums did well also, but peaches were a failure. Indian corn, though not in a favorable position, is assimilating to the climate and soil. The cultivated grasses grow well, but are not needed. The land, however, was not so rich as in Illinois and some of the Western States. Fir trees were frequently seen 10 feet through and 100 yards high! The timber is used for spars, rails, &c. Pitch and turpentine are also produced. The yew tree is very valuable for posts. Mr. G. also gave a description of the bays, and said Oregon would yet be one of the great depots of the world. In some districts there were ashes on the soil, and such spots were very fertile. In this connection he instanced the fact—upon the best authority—of a crop of 1100 bushels of potatoes to an acre! Spots of alkalies were very common, and irrigation in some cases was needed. Gold has likewise been discovered in some localities, but is worth only from $8 to $12 per ounce, and the rivers which contain it all flow from a certain point. In conclusion, the speaker hoped to be excused for wandering from the real question in what he had presented the meeting.

Mr. DE WITT, of Agawam, had had some experience in raising turnips, and spoke well of them. But when fed to cows for milk, he thought some meal should be given in advance. He also advocated the raising of green corn fodder, planted thick, for cows.

The time for adjournment having arrived, the chairman announced the next subject for discussion: *Neat Stock—the adaptation of different Breeds to different localities and purposes.* Mr. HOWARD, of the *Boston Cultivator*, would preside. —Adjourned.

COE'S SUPERPHOSPHATE OF LIME.

The following letter from Hon. Marshall P. Wilder, one of the most eminent agriculturists in New England, gives a very gratifying account of some experiments with Coe's Superphosphate of Lime:

Dorchester, Nov. 20, 1861.

DEAR SIR:—I take pleasure in enclosing, for your examination, some facts in regard to the comparative value of the superphosphate of lime, purchased of you last spring.

Experiments on Old Mowing Land.

This land was divided into three equal lots, of one-fourth of an acre each, and dressed as follows:

	Hay Product.
No. 1, with one-half cord manure, valued at $3,00	.....864 lbs.
No. 2, with 100 lbs. guano, " " 3,00	.....750 lbs.
No. 3, with 100 lbs. Coe's superphosphate of lime, valued at $2,50	.....948 lbs

Experiments with Carrots.

This land was old sward land, turned over last fall, and was divided into three equal lots of one-eighth of an acre each.

	Product.
No. 1, with 1½ cords manure, valued at $8,00	.....75 bush.
No. 2, with 50 lbs. guano, " " 1,50	.....60 "
No. 3, with 50 lbs. Coe's superphosphate of lime, valued at $1,25	.....90 bush.

Experiments on Two Acres of Old Meadow Land.

This land had probably never been plowed before. In the month of August last, the brush, brakes, hedge, &c., were taken off, the sod reversed, and the surface made as level as practicable. It was then seeded down with foul meadow and redtop seed, with 400 pounds of your superphosphate of lime to the acre. The seed came up well, and at this time the grass is so luxuriant and thickly set, that it attracts attention at the distance of half a mile or more, and should the grass not be winter-killed with ice, there will no doubt be a fine crop next summer. In this instance, as in many others, the economy of the superphosphate over common barn-yard manure is evident, the cost of the former being not more than the expense of carting

would have been of a sufficient quantity of stable manure to produce a like result.

The superphosphate of lime is therefore a valuable fertilizer in the reclamation and renovation of old pasture or meadow lands, and especially so where lands like the above are located a mile or more from the homestead.

Superphosphate of lime is a valuable article in promoting the growth and increasing the fibrous roots of young trees and grape vines, and when applied in liberal quantities to the roots of bearing trees, has a beneficial influence on the size and beauty of the fruit. It is equally useful as a fertilizer for cereals, grasses and vegetables, and from experiments made heretofore, I have hopes that it may prove a preventive of the blast upon young seedling pear stocks, and to the mildew on peas and other plants subject to these diseases.

As a quick, and also as a durable fertilizer, I have seen many proofs in past years. I have ever considered it as one of the most economical manures in use. Yours respectfully,

MARSHALL P. WILDER.

For the New England Farmer.

NOTES FROM THE MONOMACK.

——, *January* 22, 1862.

FRIEND BROWN:—I have not forgotten your kind request, made long ago, that I should occasionally "note" something for the especial benefit of the readers of my favorite *Farmer*, but other matters have, until recently, so completely monopolized my time and thoughts, that the thing was hardly possible. Now, however, I can occasionally find a breathing-place, and, unless you make haste to repent of your folly in extending the above-mentioned invitation, and summarily "cancel the bond," you are likely to hear from me quite often.

With this, I send along a few specimen bricks, and if your readers don't cry "quits," you may expect "a few more of the same sort" from

Truly yours, SAGGAHEW.

AN HOUR IN A MODEL HOT-HOUSE.—One year ago, (Feb., 1861,) the writer was one of a party of about forty members of the "Great and General Court" of Massachusetts, who paid a flying visit to that ancient city, and celebrated watering-place—Newport, R. I. The ostensible object of the expedition was to make a sort of popular legislative survey of the route of a proposed railroad extension; while it was expected, incidentally, of course, to have a right down good time. The first object was fully accomplished, as may be seen from an examination of the legislative files; and the latter was—"ditto," as may be proved by the cross examination of each, either, any, or all, of the aforesaid forty respectable gentlemen.

While the rest of the party paid a shivering visit to Fort Adams, the writer, under the guide of a mutual friend, paid his respects to the superintendent of the estate of Beach Lawrence, Esq., Mr. Alfred Chamberlain, where he was most courteously received, and passed an exceedingly pleasant hour. Of the many objects of interest which came under his observation at the time, I propose now to speak only of his visit to the extensive hot-houses on the estate.

Mr. Chamberlain, the superintendent, is a native of England, an educated gardener, and an enthusiastic lover of all that is in any way connected with his profession. Among his many qualifications for the resposible post he now occupies, may be mentioned seven years' experience in the immediate employ of William Rivers, the celebrated English gardener and horticulturist. The latter is well known as the originator of a system of dwarf-pot-culture, for fruit trees and vines. That Mr. Chamberlain was no dull scholar of this distinguished master in the art, I had abundant opportunity for verifying upon the above occasion.

Though it was in the depth of winter, I found grapes, tomatoes, strawberries, pineapples, cucumbers, lettuce, potatoes, &c., &c., in all the various stages of growth, up to perfect maturity. To such a state of perfection has this artificial system of culture been brought, that these, and many other kinds of fruit and vegetables, fresh from the vines, are ready for the table every day in the year! Among the first of these to attract my attention were the

TOMATOES.—These were planted along the back side of the elevated borders, and were carefully trained to neat wire trellises, each plant occupying perhaps four feet wide, and four to five feet in height. Mr. C. recommends that they should always be trained to an upright trellis, and pinched back freely, as they look neater, occupy less room laterally, will produce a greater quantity of fruit, and ripen it a fortnight earlier.

Having tried the trellis plan of training, in garden culture, I have concluded that it is too troublesome for ordinary out-door cultivation, in all cases where *time* is any object. It is true that the vines look neater, and, perhaps, yield more fruit, but the value of the time consumed in tying up the vines will usually far exceed that of the extra crop. I prefer to spread a little coarse litter, leaves, or—better still—brush, under the vines, before they begin to lodge, and then let them run as they please. I have also tried the plan of clipping, or pinching back the shoots, but, for the same reasons, have discontinued the practice. I have recently learned that our friend, Mr. L——, whose business is solely market gardening, and who raises at least five hundred bushels of tomatoes annually, after trying various plans, has concluded that the most economical method is to let the vines have their own way.

STRAWBERRIES.—Of these there were several hundred pots, arranged principally on a shelf near the ridgepole, where they were flourishing with the greatest vigor. A row of them placed over the pipes in front, were in fruit, and would have convinced any one that this delicious fruit deserves more consideration in hot-house culture. I never saw vines more heavily laden. They were principally, *Wilson's Albany Seedling*, of which Mr. C. spoke in the highest terms, for their bearing qualities.

CUCUMBERS AND SQUASHES IN POTS.—Not the least of the many objects of interest which met my eye upon the above occasion, were the pots of cucumbers, squashes and melons, all in a bearing condition. Mr. C. expressed the opinion that, for gardens, it would be economy to start these plants in pots, under glass, and after the ground was prepared to receive them, and the plants were beyond the reach of bugs, to *set the pots into the ground*, without disturbing the plant. His remarks upon the subject so commended themselves to my mind that I tried the experiment last

spring, with some marrow squashes. I took several plants which had been kept in five-inch flower pots until they were too large to be relished by the bugs, and transferred then to the garden. All but one of them were carefully tipped out of the pots, without breaking the ball of earth, and as carefully set into the ground. The one pot was simply set into the ground so as fairly to cover the top of the pot. In order to make sure that no favors should be found on its side, this plant was set in the poorest soil of the whole row. All the plants were covered with musquito netting for a few days, and the one in the pot was also watered a few times, when the boxes were removed, and they were left to take care of themselves. For a short time the bugs almost literally covered them, but were compelled at last to abandon them uninjured. The single vine seemed to grow more slowly than the others, and at no time during the season was it as large. On gathering the fruit in the fall, I took from this vine three well ripened squashes, weighing together *thirty-nine pounds*. This I found to be fully equal in weight to the average of the other vines, and also to vines in the garden planted in the usual manner. On taking up the pot, I found that no roots had entered the ground over the top of the pot, and but a single root, about the size of a pipe stem, had passed into the earth through the hole in the bottom. Through this single root, then, must have been drawn all the earth nourishment for maturing both vine and fruit. Experiments made at the same time with cucumbers, and melons, have convinced me that, for gardens, Mr. Chamberlain's plan is a good one, and the coming spring I propose to treat all my vines in this way. The same plan will also apply to flowers, and a small propagating case is amply large to start all the flowers, melons, vines, &c., that can find room in an ordinary garden.

DWARF POT FRUIT CULTURE.—I found Mr. Chamberlain to be not only completely at home in all relating to the culture of fruit trees and vines in pots, but confident that the time will soon arrive when it will become so common as to cease to be novel. During his experience with Mr. Rivers, he had not only seen the system made possible and practical, but positively *profitable*. If it was successful in England, he was confident it might be made successful in this country, and he was determined that it should be made so. He had several hundred pear, apple, peach, cherry and other fruit trees, and a large number of grape vines, in pots, and in various stages of growth. They were of various ages, from one year to six or more years old. I saw pear trees which had been taken from the ground, in a common nursery row, *when four years old*, and placed in a twelve or fourteen-inch earthen pot, and, so far as I could judge, they were in a thriving condition before the end of a twelvemonth. All his trees had been purchased from ordinary nurserymen, and while they did not give him the satisfaction which those more carefully propagated and trained would have done, they demonstrated more forcibly the practicability of his system of culture. At the time of my visit, every tree and shrub out-doors were covered with a thick coating of ice, and I was surprised to find a large number of pear trees in pots standing on the north side of the hot-house, entirely unprotected, and covered with sleet like the rest. I was told that they had been in that bleak situation all winter, for want of room inside, but no fear was expressed as to their suffering any injury thereby. Inside, in the reserve-room, I saw a large number, of various ages, waiting their turn to be placed in the forcing-house. Their plump fruit buds showed plainly that the cultivator's expectations of a crop of fruit from them, at least, *looked* reasonable. In the forcing-house were a variety of pears, peach, cherry and plum trees, and grape vines in pots, and showing fruit in various stages of growth. If my judgment was not sadly at fault, they were all in a healthy and thriving condition.

Among the novelties in this collection, was *a pear tree with endless limbs*—i. e., with every limb inarched. Some of the limbs were bent around and ingrafted upon themselves, others were ingrafted upon the trunk, and in several cases the ends of two limbs had been ingrafted upon each other. Being thus prevented from making a free growth of wood, the whole energy of the roots was compelled to the task of perfecting the fruit. The tree had not, as yet, fruited, but the large and well-formed fruit buds gave promise of success in the novel experiment.

FRUIT BASKETS.—But among the many objects of interest in this model establishment, none so enlisted my attention and curiosity, as Mr. Chamberlain's newly invented fruit baskets. These may be described as baskets (of any desired form,) made of open wire work, with a tin dish, or pan, inside. In this inside dish is placed a quantity of charcoal, bone-dust, &c., in which the roots of the tree, or vine, are planted, and they are then well covered with moss, which is, of course, kept constantly moist. Further nourishment is supplied in the form of liquid manure. Planted in this manner I saw peach, cherry, plum and pear trees, and grape vines, flourishing in the most gratifying manner. I took down one of these baskets from its hook, and counted twenty-six peaches, of about bullet size, on the tree contained in it. Grape vines, prepared in a similar manner, exhibited large and handsome bunches of fruit. I was assured that *not one of these baskets contained even a spoonful of soil*, or earth, and yet the trees and vines appeared to be in a most flourishing condition. After fully explaining the construction and philosophy of his invention, (for which he has received letters patent,) Mr. Chamberlain informed me that at least one person, who claimed to have visited his place and seen his specimens of fruiting trees and vines in baskets, had gravely pronounced the whole thing a *humbug*, and in the columns of the *Horticulturist* had declared that the specimens of peaches, grapes, &c., on these trees and vines, were *artificially fastened on*, to deceive the public. Mr. C. therefore called my particular attention to the specimens, and expressed the hope that I would expose him, if I found any appearance of fraud or deception in the matter. I made a rigid examination, and was fully convinced that there was no humbug about the invention. Having since read the article referred to, I must confess that the writer, if in earnest, was either very blind, or purposely misrepresents. Since my visit, Mr. Chamberlain has exhibited specimens of his trees and vines in baskets, at various horticultural exhibitions, where they have been seen and examined by many thousands of persons, without the detection of any fraud in

them. Not only this, but many others are now meeting with equal success in similar cultivation, and the sale of these patent fruit baskets is already quite extensive.

AN HOUR WITH THE MILCH COWS.

We recently had the pleasure of visiting the barn of Mr. ABIEL H. WHEELER, of Concord, in this State, of looking at his herd of milch cows, and learning from him some of his ideas as to the best stock for milking purposes, and the manner in which he feeds and shelters them, in order to secure the largest possible product of good milk.

His barn is 85×41 feet, nearly all the northwest side being used as bay room for hay, and his stock consists of twenty cows, two horses, two bulls and several swine. The bulls are pure Ayrshires, are matched, hardy and docile, and are usually in the yoke whenever there is heavy work to be done. He has pure Ayrshire cows, and thinks this stock, for milking purposes, as good as any of the favorite breeds among us. He cuts about 60 tons of hay annually, and on a portion of his land at the rate of five tons per acre. The cattle are all confined in stancheons, in one leanto, and are bedded with fine, pine shavings from a neighboring pail factory, or with pine leaves gathered from the forest. The cows were all scrupulously clean, no droppings or dust being allowed to accumulate upon them—of course the floors under them were clean and sweet.

His mode of feeding is as follows. All the various kinds of fodder, excepting corn fodder, are cut, and the straw and different qualities of hay are mixed, and fed dry. The cattle eat this so readily that he says not a bushel of orts has been left from it during the winter. Each cow also receives in grain of some kind what is equal to three quarts of corn meal per day, which is fed by itself. The corn fodder is fed to them uncut, from which they take what they please, and the remainder is worked up with other coarse litter for manure. Under this feed the cows keep in good condition, and yield a liberal flow of milk. He thinks this a profitable mode of using the fodder. The cattle are tied up at night through the year, and are always supplied with abundant manure-making materials. The barn-yard is dishing, and amply covered with litter and muck to absorb all the liquids that fall upon it.

His barn-cellar is of equal extent with the barn itself—the north side being filled with the various vehicles of the farm, and the other side with the droppings, where a stout hand was overhauling, pulverizing and mixing them with muck, sand, pine leaves, or such other materials as he had stored up for winter use.

Mr. WHEELER has one acre and one-fourth in asparagus. This is cultivated with care, and has brought him in cash the sum of $500 in a single year. The asparagus tops are deposited in the barn-yard, in the spring. He top-dresses his grass lands liberally in the fall and keeps them well seeded, which may account for the product of *five* tons per acre which he has cut.

Near the buildings he has a fine orchard of 300 or 400 young apple trees, and about 50 pear trees, which greatly improve the appearance of the farm, and which promise to be a source of future profit. Every thing about his buildings—so far as a winter view could go—appeared convenient and tidy. The stock was warm and contented, the buildings themselves in good repair, the wood-houses filled with dry wood, and both wood and water so "handy" as to have a strong tendency to keep all the family in a complacent frame of mind.

Mr. WHEELER is one of the best plowmen probably in the States, and few, if any, have carried away more prizes from the field of competition than he has. He not only superintends, but takes a leading part in all the labor of the farm, and during the winter has the entire charge of the stock. Indeed, if we saw anything in which we thought he should make a change, it is that he should labor less. He is at present the President of the *Concord Farmers' Club*, where he presides with great punctuality and promptness, and evinces the same enthusiasm that he does in all that he undertakes.

Mr. W. has a son in the army, now a prisoner at New Orleans. He was taken at Bull Run, while remaining by the side of a sick associate.

For the New England Farmer.

DISSEMINATION OF FOUL SEEDS.

MR. EDITOR:—Can there not be some remedy devised to prevent the vending of foul seeds with the seed we wish to purchase, and also to compel negligent, slovenly farmers, to extirpate all noxious weeds and plants that are liable to be carried by the wind and birds to the premises of adjoining neighbors?

I am of the opinion, that most of our hay seeds contain more or less foul seed, and that many a careful farmer finds himself taxed with many a weary day's work in consequence. I think this is a growing evil, from the fact that I see many more noxious, worthless plants than formerly, in all the region I am acquainted with. I know of many farms that are so overrun with wild carrot as to diminish the rents fifty per cent., and in some cases even more. These are, or were, valuable lands on the south-east end of Rhode Island. From the opposite side of the bay, many of these farms, when the carrot is in bloom, are as white as if covered with snow. Plowing don't destroy it, and mowing seems to spread it, as the root sends out immediately numerous shoots to take the place of those cut off. It is a kind of hydra monster. Nothing but plucking it out by the roots will extirpate it. It is now quite common all through

this section, and if suffered to increase, will greatly diminish the value of our farms.

I could mention several other plants that are a great nuisance and evil, but will confine myself to but one more, viz., Johnswort. I have been credibly informed that, in some parts of New York State, this plant has so got the upper hand of the farmers that they have given up some of their fields to its entire possession. Within sight of where I live, is a farm that is fast coming under its pestiferous power. The owner don't seem to care much about it; thinks he can get on, somehow, as long as he lives, and on the principle of "after me, the deluge," bequeaths to the coming generation a heritage of expense and trouble.

For one, I do not believe we have a right to act, or not act, without reference to the future. How is it possible for any one to reconcile such a course with moral right? Each succeeding generation should strive to excel its predecessor in all that is calculated to promote the highest good of the present, and of generations to come. Gratitude, and not remorse, would then be the heritage of all, and the world a comparative paradise. But to return to our subject. The evil is upon us. What is the remedy? Will not some of your numerous correspondents tell us, or at least give their views of the matter? Can we not have a law that will reach this case? Could not seed inspectors be appointed, and licensed seed stores be established, where the farmer could go and be sure of getting a pure, unmixed article? In the case of the negligent farmer, who suffers his lands to be overrun with weeds to his neighbor's injury, could we not by law require him to cease injuring his neighbors? He has no just right to do it. Why not restrain him by penalties? O. K.

Rochester, 1862.

AGRICULTURAL SOCIETIES.

WORCESTER NORTH AGRICULTURAL SOCIETY.—We have before us the Transactions of this Society for the year 1861. The annual Exhibition took place at Fitchburg, Sept. 24, 1861. We learn from them that the show in vegetables was far superior to any before presented; that of flowers was brilliant; the mechanic arts and manufactures were also liberally displayed, as were the articles of bread, butter, cheese, pickles, honey, preserves and wines. There was no regular address, but after dinner appropriate remarks were made by several persons. The officers for 1862 are:

President—L. H. BRADFORD, Fitchburg; *Vice Presidents*—Leonard Burrage, Leominster; Benjamin Wyman, Westminster; *Secretary*—W. G, Wyman, Fitchburg; *Treasurer*—F. C. Caldwell, Fitchburg.

RUTLAND COUNTY AGRICULTURAL SOCIETY.—At the annual meeting of this Society held at Rutland, Vt., January 1, 1862, the following officers were elected:

President—JAMES M. KETCHUM, Sudbury; *Vice Presidents*—Jesse L. Billings, Rutland; A. D. Smith, Danby; *Secretary*—Henry Clark, Poultney; *Treasurer*—Hon. Zimri Howe, Castleton; *Auditor*—H. W. Lester, Rutland.

For the New England Farmer.

WINTER.

BY R. F. FULLER.

Now the winter is invested
With the downy, feathery snow.
Every mountain-top is crested,
And the valley clad, below.
Winter's ermine, as a ruffle,
Leafless woodland seems to deck;
And the pines are like a muffle
Of warm furs, around his neck.
See! the cloud-attended morning,
All effulgent to the view;
And the sparkling snow adorning,
Almost with a rainbow hue!
In the forest, now, I wander—
Yes! the winter's face to see.
Every lesson I will ponder,
That the seasons show to me.
Hark! a whistle, flute-like, airy,
Like a signal, clear, and sweet!
'Tis, perhaps, the reigning fairy
Winds her horn, in this retreat;
"Chickadeedee!"—music cheery!
'Tis the spell of memory, then,
In the woodland, waste and weary,
Wakes the summer song again!
No! the birdie, bounding, leaping,
Lights upon the feathery snow!
Soft the breast of winter, sleeping—
Would, for thee, 'twere always so!
Say, thou plaything of the breezes!
When the winter, wan and cold,
In the moaning forest freezes,
Where is, then, thy little hold?
"Chickadeedee!" chants the fearless,
Flitting bird, upon the tree:
"Never would your heart be cheerless,
Had you confidence, like me!"

I will study, then, the winter,
In its ever varied phase—
When the snowy sparkles glinter
In the bright and sunny days:
When the air-filled flake, descending,
In the day or in the night,
Seems as if the heaven, bending,
Would upon the earth alight:
When the stars shine out with pleasure,
On the mirror of the snow;
While a galaxy of treasure
Seems the spangled bank, below!
—We have all a winter season,
When our scanty lives we close:
It is fitting we should reason
Of the winter and the snows!
Shall we, then, so peaceful slumber
As this sunny, snowy day;
Or the dreams, that conscience cumber,
Frighten our repose away?

THE MOSS-LANDS.—The moss-lands are formed, not by the perpetually diffused burden of mist, but the going and returning of intermittent clouds. All turns upon that intermittence. Soft moss on stone and rock; cave fern of tangled glen; wayside well, perennial, patient, silent, ever thus deep, no more, which the winter wreck sullies not, the summer thirst wastes not, incapable of stain as of decline, where the fallen leaf floats undecayed and the insect darts undefiling. Crossed brook and ever eddying river, lifted even in flood scarcely above its stepping-stones, but through all sweet summer keeping tremulous music with harp-

strings of dark water among the silver fingering of the pebbles. Far away in the south the river-gods have all hasted and gone down to the sea. Wasted and burning, white furnaces of blasting sand, their broad beds lie ghastly and bare; but here the soft wings of the sea-angel droop still with dew, and the shadows of their plumes falter on the hills; strange laughings, and glitterings of silver streamlets, born suddenly, and twined among the mossy heights in trickling tinsel, answering to them as they wave.—*Ruskin.*

VINEGAR IN TWENTY-FOUR HOURS.

The whole philosophy of the manufacture of vinegar is included in the word oxydation, the alcohol contained in cider, beer, or wine, combining with the oxygen of the atmosphere, becomes acetic acid, which in a diluted state is vinegar.

The methods usually pursued in the domestic manufacture of this article are, to say the least of them, susceptible of improvement. The conversion of cider into good vinegar, by exposure to the air in casks, requires weeks and even months to accomplish; because, only a small surface is exposed at one time to the oxydizing action of the atmosphere.

By exposing a larger surface of the liquor to the atmosphere, oxydation takes place with corresponding rapidity, and the process may be completde in from twenty-four to forty-eight hours.

The method of accomplishing this rapid acetification, which has long been known to scientific men and manufacturers, may be pursued without difficulty in private houses, as follows: Take a clean flour barrel, and bore auger holes all around the sides, and in the bottom; set it over a flat tub or open cask, and fill it light with beech shavings which have been soaked in vinegar. On top of this barrel, which is open, lay two strips of wood, and resting on these, a pail filled with cider, beer, or the like. Procure twelve or fifteen lengths of cotton wicking, about thirty inches long: which, after dipping in the liquid, arrange round the sides of the pail at regular intervals so that one end of each wick will be hanging in the cider, and the other one hanging down outside, and below the bottom of the pail. By means of these wicks, the pail will gradually be emptied of its contents, which, trickling over the shavings, will be exposed to the air, absorb oxygen, and finally be received in the tub beneath. By returning the liquor into the pail above, and suffering this trickling process to be repeated two or three times, a splendid vinegar will be obtained. The whole secret of the process lies in the mechanical increase of surface accomplished by the shavings.—*Scientific American.*

REMEDY FOR RINGWORMS.—The *North British Agriculturist* says that the disease locally known as ring worm or tetter, which shows itself about the head and neck of young cattle, in the form of whitish dry scurve spots, can be removed by rubbing the parts affected with iodine ointment. The disease may also be combated by the use of sulphur and oil; iodine ointment is, however, to be preferred. As this skin disease is easily communicated to the human subject, the person dressing the cattle should wash his hands with soap and hot water after each ointment.

For the New England Farmer.

POVERTY OF SHADE.

MR. BROWN:—I am so confident that you desire to give only sound doctrine to the readers of the *Farmer* that I venture a criticism on one of your "replies," with the full confidence of your willingness. In the weekly *Farmer* for Jan. 11th, in answer to "SUBSCRIBER," from North Dunbarton, N. H., you say, "Perhaps the better way would be to sow oats or barley with the grass seed, and cut them for fodder. This course would not materially exhaust the soil, and the oats might, in some measure, protect the young grass, and give it an opportunity to escape drought, if it should ensue."

It is a very common idea that the shade afforded in such case is more than an offset for the moisture-exhaustion which it costs. But such is not the case. While the roots can get moisture, the plants will not dry up because of the power of the sun upon them. During last summer we had a severe drought. I had a piece of ground under my care sowed with oats and grass seed. On a part of it the oats were cut down by insects, so as to leave scarcely a blade. There the grass lived through the drought. On another part the oats stood unharmed by insects. There the little grass roots all died from the severity of the drought. Certainly it was from this cause that the grass failed there.

In a field of potatoes, also, where perhaps an eighth of an acre had a crop of coarse weeds which lived in defiance of the hoe, there the soil became so extremely dry that the potatoes died of thirst; while the case was different on precisely the same kind and condition of soil where the weeds had been subdued. The shadow of a weed will never pay for the moisture it steals in time of drought, and the same principle will hold good against oats or barley in a water-account with the soil. The more roots there are to suck the parched soil the sooner its moisture will be gone. Naked soil will retain moisture beyond that which is thickly covered with growing grass or grain. A row of corn, skirting grass-ground, will curl up from drought before one would at a distance from where so many roots are sucking. A weedy piece of ground will suffer worse than a clean field.

Lee, N. H., Jan., 1862. COMINGS.

REMARKS.—You judge us correctly, friend COMINGS, in supposing that we "desire to give only sound doctrine to the readers of the *Farmer*." Our language, you will observe, was quite guarded. Before proceeding, let us see what the point at issue is: It is *not*, what course of culture will produce the largest crops of grass, but, simply, what circumstances will best promote the germination of grass seed and its *early* growth?

In the *first* place, the oats were to be cut green—not allowed to seed—which would leave the surface free for the young grass after it had got fairly started, and not "materially" exhaust the soil—that is, compared with the exhaustion when oats are allowed to mature.

Secondly, oats start quick, partially cover the surface, and thus prevent a large amount of *evap-*

oration, keeping moisture in store for themselves and the young grass, by absorbing moisture from the air, as well as exhausting it from the soil,—for the plants are living and breathing organisms, and a mutual action is continually going on between them and the soil. "They are first fed by the food which the root procures from the earth, and a part of the nutritive matter which is stored up in the seed-leaves. They feed especially upon the latter until the store is exhausted, and by the time this happens they are clothed with leaves which are themselves *able to feed them* after the seed-leaves have perished." This is the language of Prof. LINDLEY,—than whom there is no higher authority,—and we cite it to show that the oat plants among the grass receive a *large amount* of their support from the atmosphere, and consequently, do not—in their early growth—exhaust the soil so much as they benefit it by their shade, and the moisture they bring to it from the air. At any rate, not so much as is stated by our correspondent. Both HALES and DUHAMEL—among the very highest authorities—say that branches imbibe moisture nearly equally by either end; and consequently the sap moves with equal facility *both upwards and downwards*. M. BONNET states that "leaves will imbibe *enough of water to support the vegetation* of a whole branch, and the leaves belonging to it." This does not look as though the leaves of the oat plant were made merely to *rob the soil!*

Our friend may sow the seeds of the elm, maple, birch and pine, on a piece of *un*sheltered land, and he will find that a large proportion of the plants—if they come up at all—will perish; but if he goes to the forest, cuts the trees and brush, scrapes away the leaves, stirs the soil, and sows the same kind of seeds *there*, they will not only come up, but under the genial protection of the surrounding trees and shrubbery, will grow and flourish in surprising numbers. He will find this piece of soil, *in the forest*, although *no mulching lies upon it*, moist and soft, when the pastures in the vicinity are parched and barren.

Was not our suggestion in accordance with the almost universal practice of farmers, who sow oats or barley with grass seed, *not entirely* because they *desire the crop of oats*, but because the oats themselves are, in some degree, a protection to the young and tender grass plants? A very successful farmer informed us, a few days since, that he invariably sows three bushels of oats per acre with grass seed, and that he secures the best results under this practice, which has been continued through many years, because it is a successful practice.

It is our practice to sow grass seed among standing corn, and we have never failed of securing favorable results under ordinary circumstances—but always the most satisfactory *where the corn stood the thickest*, although on soil of the same quality and in the same position. We have heretofore urged this as a reason for laying lands to grass while the corn is standing.

We are informed that where coffee is cultivated, it is always done under *the protection of trees*; that although the trees spread their roots far and wide, they are *condensers of moisture from the air* as well as extractors of it from the soil, and are thus of essential benefit to the young and tender plants. On the same principle, pasture lands are much benefited by occasional shade trees scattered over them,—and we believe it is generally admitted, that such pastures afford more grass than those entirely bare of trees. That though the trees sap the soil, their other beneficial action upon it is more than balanced by the drafts they make upon the soil itself. FOURCROY—another high authority—says: "In clearing up new lands, the trees on the summits of hills should be left standing. They attract the vapor that floats in the atmosphere, and the rains, and serve as *conductors* of that element *to moisten the ground*. By their shade they retain the verdure and feed." This is precisely the case.

Another advantage of the oats is, that they *check the currents* of wind, and thus prevent evaporation, in a great degree. This point needs no argument, as all admit that hay dries much faster when there is a wind than when it is still; the wind rapidly carries away the natural evaporation of the soil, which is continually succeeded by new moisture and carried off by fresh currents, and thus rapidly desiccates the ground. The oats tend to keep these currents from the young grass, and consequently a large portion of the evaporated moisture is kept among them.

The difference of opinion entertained, seems to us to arise from the fact that *no credit is given to plants for the absorption by them of water from the atmosphere*. If they did not receive and impart it, how long would it be, in the absence of rain, before the soil would become utterly unfit to sustain a plant? We quote Lindley again: "If the branch of a plant is placed in a bottle of water, and the neck of the bottle is luted to the branch, so that no evaporation can take place, nevertheless *the water will disappear*; and this can only happen from its having been *abstracted by the branch*." This is just the action which we ascribe to the leaves of the oat plants as they stand among the grass.

As we have this high authority before us, let us quote again from it: He says—"Since a plant does not perspire [sweat] at night, and since its absorbing points, the roots, remain during that period in contact with the same humid medium [that is, the soil] as during the day, *they will at-*

tract fluid into the system of the plant during the night, and consequently the *weight* of the individual [the plant] *will be increased.* In like manner, if plants in the shade are abundantly supplied with moisture at the roots, *they will also gain more than they can lose;* and as this will be a constant action, the result *must necessarily be to render all their parts soft and watery.*" The oat plants, *while the grass is young*—and this is the *only* time which we are discussing—keep the grass both *shaded* and *moist*, and the result follows which Prof. Lindley has just described.

The above shows the *means* of keeping the ground moist, as we suggested to our Dunbarton correspondent, and the following from the same high authority already quoted, shows its importance, viz.: "As a general rule, therefore, we are authorized to conclude that the ground should be abundantly supplied with moisture when plants *first begin to grow*, and that the quantity should be diminished as the organization of a plant becomes completed." On this point, however, there is probably no diversity of opinion. We find further confirmation of our views, in Davy, Doctor Ingenhouz, Senebier, and others.

Let us, in conclusion, revert for a moment, to the point at issue, as, if we adhere strictly to that, an agreement will be more likely to take place. It is *not*, what course of culture will produce the largest crops of grass, but, simply, what circumstances will best promote the germination of grass seed and its early growth?

We have thus given some of the "reasons" for the "faith that is in us." They are general principles,—and not the results of one or two isolated cases, upon which it is never safe to build up a theory.

We cordially thank our correspondent for his criticism, so frankly and kindly expressed, and sincerely desire to be free from all "hobbies," and to be wedded to no theories or opinions, merely because we once entertained them. If they cannot stand the test of fair criticism, we mean to relinquish them, and be found on the "progressive road," shoulder to shoulder with our long-tried and intelligent correspondent, "COMINGS."

PRESENTS FROM JAPAN.

The new Japanese presents just sent to the President of the United States from the Tycoon of Japan, are the finest that has ever been seen in this country. A lacquered box containing a letter thanking the President for the reception of his ambassadors—in most courtly phrase in characters as stately as those usually found upon the sides of a tea box, wrapped in the yellowest of yellow silk, with plenty of gilt. A sword of exquisite steel, with the handle bedded with large pearls and mounted in the finest gold. Blocks of crystal from the sacred Fusiyama Mountain, of diamond clearness. Vases of antique bronze, exquisitely sculptured in relief with tortoises and stones of untold value. A punch bowl fit for a Cyclops to "wet his whistle" in, so large that the President's two sons curled up in it and the cover was put on; candlesticks some four feet high, gold mounted, with vases of every variety of pattern and shape; an entire suite of armor quite worthy of the middle ages. The people are anxiously waiting to have these things sent to some place—the Smithsonian or the Patent Office—where they can get a glimpse at these gems of crystal, steel, bronze or porcelain. A whole dinner set, with hundreds of pieces of Japanese crape, silk and brocade, forms a part of this royal present.

For the New England Farmer.

WHAT SHALL I RAISE?

MR. EDITOR:—I desire, through your columns, to inquire how, in *these times*, farming can be made profitable? My farm is composed, mainly, of mowing and tillage land, lying in the meadows which skirt the banks of the Connecticut river, in Hampshire county, of this State. This land is worth from one to two hundred dollars per acre. Crops raised in this town and vicinity consist of Indian corn, broom corn, hay and tobacco. The price of Indian corn the past season has ranged from fifty to sixty-five cents per bushel, and broom corn four to five cents per pound; the low prices of these commodities, I suppose to be mainly owing to the great quantities of the same that are produced upon the fertile fields of the West, in connection with the comparatively small outlay for their production there. Taking the estimated value of our land, and the price of labor, it requires no argument to prove that these are not profitable. The hay crop, so far as it is produced for the purpose of fattening cattle for market, is, if anything, worse for the farmer than the raising of Indian corn and broom corn. The tobacco crop is the only one that remains to be considered. My neighbors find the raising of this article very profitable; but I, believing its use not only useless, but positively injurious, choose not to raise it.

Now, Mr. Editor, will you, or some of your correspondents, inform me what is the best course to be pursued to render my farm profitable? You will, of course, understand that the high price which tobacco brings in market, increases the price of labor among us, as well as the price of land, and consequently, those who do not raise tobacco must pay the same wages for hired labor, as those who do. The price of land is also graduated upon the price of tobacco. HAMPSHIRE.

Jan. 7, 1862.

REMARKS.—The letter of our correspondent is a "poser," we confess. We admire his stern principles, and heroic determination not to yield to "the tempter." It seems to us that land situated as "Hampshire" describes his farm, and valuable as he estimates it, must be capable of bearing large crops of hay,—and perhaps root crops,—say *carrots*, or *parsnips*. Hay, pressed, or the root crops, could be sent to a distant market, if they are not salable near by. Or, perhaps, by temporarily set-

ting a lower estimate on his land, he could afford to raise other crops,—Indian corn, wheat, barley or oats—and wait patiently for better times.

If a market for them is not too far off, could he not cultivate the small fruits, especially strawberries, or asparagus, and find a fair return from them? The latter crop is made very profitable by many persons living twenty or thirty miles from any large market.

It is quite probable that there are some particular localities, where farming is less profitable than it generally is; and so it must be with the carpenter, tradesman, and any other occupation.

EXTRACTS AND REPLIES.

PASTURE—COMPOST HEAP—SUBSTITUTE FOR ASHES—A LOAD OF MANURE.

1. I am clearing a piece of ground which has been used for more than half a century as a cow pasture; for several reasons I do not wish to plow it. Will you inform me through the *Farmer* if ground bone or superphosphate of lime would be good for a top dressing, and if so, how much to the acre? Or what can I do to improve it?

2. I have several cords of soil composed of yellow loam, clay and decayed vegetable matter; what can I mix with it to make a good compost?

3. I notice in the *Farmer* that ashes is frequently recommended for composting and fertilizing, and I know that it is good—but I am situated where coal is mostly used, and, therefore, I can not procure wood ashes. Is there anything that can be profitably used as a substitute?

4. Most of the statements published in regard to the application of manure speak of so many loads being used. How much do farmers mean by a load? Would it not be more definite if they were to say cords or bushels?

In return for the information here asked for, I shall be happy, whenever I may be able to communicate for the benefit of your readers. C. G.

Hingham, Jan., 1862.

REMARKS.—1. Bone dust and superphosphate of lime are both good for the old pasture. If you wish to be liberal with it, apply 100 lbs. of the former and 300 lbs. of the latter, per acre, as soon as the ground is bare. Then spread as many bushels of the soil which you speak of, as you can afford on top of the bone dust and superphosphate. Upon these scatter white and red clover, a little redtop, timothy and orchard grass seeds, and harrow thoroughly each way. You may succeed under this process; a slight dressing of fine, rich compost would make it nearly certain.

2. Lime, ashes, bone-dust, guano, superphosphate, fish, sea-weed, wash from the house and barn, are all good. If you can find a cask of damaged potash at low price, dissolve it and sprinkle the heap, overhauling it for the purpose.

3. Stone or oyster shell lime can, in some measure. See preceding answer.

4. A cord of manure is about 100 bushels. The common ox-cart, even full, holds about 25 bushels; heaped, about 30 bushels; so that a cord of light manure will usually be hauled at three loads. We think it would be better to use the term "bushels" or "cords" in speaking of quantities of manure.

—

HOW TO PACK EGGS FOR TRANSPORTATION.

I often have the question asked, "How shall I pack eggs for transportation?" To all such inquiries I would answer, select a strong, wooden box, fill from the bottom two inches deep with bran or shorts, then wrap every egg in wool and place them, point downward, upon the bran, being careful to leave about half an inch between each egg. After placing the first layer, fill in two inches more with bran, and place the eggs as before. When the box is full with at least three inches of bran over the top layer, jar the box gently so as to fill every cavity between the eggs, screw on the cover marked "eggs," and you may send them by express safely. I have sent eggs of the Brahma fowls by express to every New England State. A gentleman in New Jersey raised 8 chicks from 12 eggs which were packed and sent him by express. I have found that eggs packed in this manner generally succeeded well in hatching.

Salem, Jan., 1862. JOHN S. IVES.

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HOW TO GET AND USE MUCK.

Having seen so much said of muck in the *Farmer*, it has induced me to ask you a few questions on the subject as to its value. Will it pay to get it at this season of the year? If procured in the fall, how shall it be kept from freezing so that it can be spread under cattle?

Chester, Ct., 1862. A SUBSCRIBER.

REMARKS.—It is an excellent time to haul muck in the winter that has been previously thrown out. Where water does not follow the spade too rapidly, the winter is also a good time to throw it out. Muck that is intended to be used for bedding cattle should be thrown out in the summer, or early autumn, and when dry, carted to some shed, cellar, leanto, or other place of convenient access to the cattle stalls.

—

A SURE CURE FOR CHILBLAINS.

Soak the feet a few moments for three nights in succession in water in which hogs have been scalded, and it will prove a sure cure for that troublesome complaint.

ONE WHO HAS TRIED IT.

REMARKS.—As such water as our correspondent describes is not always at hand, we suggest that the afflicted drop a pint of wood ashes into a bucket of warm water, and wash the feet in that.

—

A NICE HOG.

Mr. PRESCOTT YOUNG, of Sugar Hill, N. H., recently killed a hog of the Chester breed, about 18 months old, which weighed when dressed 625 lbs. A. WELLS.

Sugar Hill, N. H., 1862.

SEED CORN.

Noticing some remarks by "O. K." in the January number of the *Farmer* about seed corn, I thought I would tell what I have done.

I have raised a small kind of yellow corn for more than twenty years. When first raised I could not find two ears on a stalk as often as I can now find three or four, and, occasionally, five to eight, good, sound ears, but some of them small.

I have taken pains to save as many good, sound ears on early stalks as I could for seed, which I think increases the number greatly.

When first planted, I could get from forty to sixty bushels per acre, now I get from seventy to nearly one hundred bushels, by actual measurement, on the same ground and with the same treatment, shelling it in October. E. R.

Hardwick, Jan. 16, 1862.

WARTS—WOODCHUCKS—DOVES.

One of your readers asks for a remedy to cure warts on a colt. I cured one on my colt by washing the warts in saleratus water. I heard it recommended for warts on cattle.

The best way I have tried to get rid of woodchucks is, to turn into the hole two or three pails of boiling water, and take care of the animals when they come out.

I have known doves to be very destructive in pulling corn, but do not think they are apt to, if well fed. A SUBSCRIBER.

Enfield, N. H., 1862.

A ROUSING HOG.

While looking over your paper of Jan. 18th, I saw an account of a fine hog killed by Mr. Erastus Howard, being 18 months old, and weighing 536 lbs., and also the question—"Who can beat this?" I have this winter killed one 15 months old, weighing 588 lbs. CURTIS PARKER.

Richmond, N. H., Jan. 2, 1862.

For the New England Farmer.

MATCHING STEERS' HORNS.

MR. EDITOR:—I have noticed an inquiry recently in the *Farmer*, how to match the horns of steers, if one horn grows down. In reply to that question I would say that five years since I had a very fine pair of Devon steers, nicely matched, with most beautiful horns, except one horn on one of them inclined to turn down, so as to look very badly, and the question was, how to remedy the defect, and have the horns grow alike. As I had previously tried scraping steers' horns to change their shape, and without any benefit in a single instance, I adopted the following plan:—I fastened a pulley to the floor directly over the steer's head, and another pulley at a point where a weight could safely be suspended, then passed a cord over each pulley, putting one end of the cord on the horn that was down, and to the other end of the cord a weight of two pounds, kept the cord on the horn most of the time during the winter, when my steers were in the stable. In that way I raised the *horn* so that at the close of the next autumn my steers' horns *matched perfectly well!* Since that time it has been tried repeatedly by farmers in this vicinity, with the like success. The horns of steers while growing, can be turned in any direction, by the continued use of a weight over a pulley, which is but very little trouble and no injury to the steers. S. C. PARSONS.

New Boston, Mass., Jan., 1862.

REMARKS.—We are greatly obliged to our correspondent for this timely and interesting information.

For the New England Farmer.

RETROSPECTIVE NOTES.

WATER FOR FATTENING SWINE, *page* 10.—A good work has been done in this brief paragraph; for certainly it is a good work to expose and destroy the influence of an absurd practice or proposal. Some one, it appears, took it into his wise head that swine might fatten better *without* water or drink of any kind than with it, and having "proved it by experience"—alas! that so much of this foolish and false "*experience*," which consists in twisting facts to support a whim or a theory, should find its way into print—gets his absurd notion printed in the *Rural New-Yorker*. This proposal, and the one-sided experience proving it, misled one reader, and so he tries the experiment of feeding sixteen shoats on dry corn, for nearly two months, without water. As might have been expected by any sensible man, "they acted like crazy creatures and a common rail fence would not stop them. They ate but little corn, and I think did not gain a pound." After water was given them, they began to eat, and act as other hogs.

This experiment, it is to be hoped, will find its way wherever the proposal may have gone, and utterly explode it, so that it may no longer have power to mislead any one. But the bane may travel farther than the antidote, and so others be subjected to the *cruel* experiment; for there are so many papers now-a-days which have what is called an agricultural department, and into which the *non-agricultural* editor foists so many absurd proposals and so many *non-practical* items, that it is to be feared the absurdity now exploded, may find its way where the antidote may not be able to follow it. For, in glancing at the agricultural department of some papers, I have seen more that was absurd and likely to mislead its readers, than of what was sensible and practically useful. I have thought this absurdity worthy of notice, *chiefly* because the admission of *such* into agricultural papers, tends to lower their reputation, and to strengthen the prejudices of many against them; and because every absurdity misleads some one or more.

SEED CORN.—In the issue of this journal of December 7th, of last year, and in the January number of the monthly edition, "O. K." states some facts which will surprise many. It appears that at a recent meeting of the Farmers' Club, connected with the American Institute, in New York city, there was a discussion upon the subject of seed corn, and that so great a diversity of opinion prevailed, as to prove that this subject was *still* involved in great uncertainty. This must cause no little surprise; for here is the most important as well as the most common crop raised

by American farmers,—raised, too, every year, by every farmer since the first settlement of the country, and yet there are questions about it, yea, even about the single subject of the seed, which are not as yet settled, after an experience by millions of farmers for upwards of two hundred years. This diversity of opinion is certainly surprising. It is time that the farming fraternity should consider this want of exact knowledge as to seed corn, and arouse themselves to such carefully conducted experiments as would settle those questions. For their own credit, if not for anything else, the members of that Farmers' Institute, as well as the members of all other agricultural clubs and societies, should arouse themselves, and institute experiments which might settle matters which should have been settled long ago. Surely we have men in our farming communities, yea, even among the readers of this journal, who are abundantly capable, and who have the means and time, if they only had the will or the wish, to carry out experiments in this matter to satisfactory results.

It is some satisfaction to find that, among the members of the Institute, there seemed to be a general agreement about one point, namely, that it is a good practice to select in the field the first-ripened, well-matured stalks, having two ears, in order that succeeding crops may ripen earlier, and be the more likely to have two or more well-filled ears on a stalk. This is a point about which there will be a general agreement among *all* farmers, as well as among the members of the club, and yet, notwithstanding this general agreement *in words*, it is a fact that the *practice* of thousands of corn-planters, in the selection of seed corn, is just such, as if there were no general agreement about the matter. Too generally, the practice seems to be, in selecting seed corn, to take the best-looking ears in the crib, or on their way to the crib, without knowing whether there were one or more ears on the stalk which produced it. Too generally, the seed corn is not selected until spring, and then, of course, there is a risk that there may have been dampness enough about either the cob or the kernels themselves to allow the frosts of the previous winter to destroy the vitality of the chit or germ. Hence, in part, the frequency of failure in the first planting, and the necessity of planting over again, and the consequent lateness in the ripening of the crop, and exposure of it to the risk of injury by frost.

But my object in noticing the article of "O. K." was, to second his efforts to induce farmers to make experiments, in order that certain questions about seed corn may be settled, the settling of which would add both to the credit and cash of farmers.

MORE ANON.

FLOWAGE CASE.

The trial of the action, *Eastman* against the *Amoskeag Manufacturing Company*, at Manchester, N. H., has just resulted, after a three weeks' investigation, in a verdict for the plaintiff for $200. The trial was designed to test the right of the Company to maintain its dam at its present height, the land-owners above it, on the Merrimac river, alleging that the dam had been illegally raised. The verdict is only for the damage done to the plaintiff's land by three years' flowage. A bill in equity is already pending to compel the Company to reduce their dam to its proper level, so that this verdict, though of small amount, is of immense importance.

The trial attracted much attention, and was very closely contested. The closing arguments were made by Hon. GEORGE W. MORRISON, for the corporation, and by Judge FRENCH, of Boston, for the plaintiff.

There is no law in New Hampshire by which land-owners can be drowned by mill-owners, without their own consent. It is time, as Gov. Andrew suggests in his message, that some change was made in Massachusetts, by which farmers may have some voice in the disposition of their own land on the banks of streams and rivers. An act by which anybody may flow another's land without notice and without consent, is unworthy of this good, old Commonwealth, or of any other enlightened State.

For the New England Farmer.

GRASS.

BY DR. JOSEPH REYNOLDS.

It groweth everywhere. Its tender blade
Shooteth in the sunshine, and in the shade;
It groweth on the hill-side, and the plain,
By the sheltering hedge, in the shady lane.
It springs by the roadside, under our feet,
In the garden, where beds and borders meet,
Under the shrubs, where blooms the scented rose,
And the wild jasmine and sweet almond grows;
It creeps up the bank, it runs down the slope,
It springs with the crocus under the cope
In the early spring, and stays in the fall
With the pansy that peeps under the wall;
In the fresh meadow, where the waters gleam
In the clear sunlight, and the sparkling stream
Winds its course, now hidden, and now seen,
It spreads its modest, cheerful coat of green.
It groweth everywhere. On the mountain,
In the valley, by the springing fountain,
In the forest, in the field, on the beach,
Just where the daily flowing tide doth reach;
It creepeth close by the shore of the lake,
As its soft rootlets sought their thirst to slake;
The waves that ceaseless lap its foam-crowned lip,
Kiss the green leaflets that stoop down to sip.
The wild deer from the wood crops the smooth turf,
As early he comes to sport in the surf.
The herds of the prairies, with the wild ass,
All find their homes in wide oceans of grass;
The droves of mustangs on Mexican plains,
The tartar's wild horse in Afghan domains,
The goats of the Alps, that climb on the rocks,
The horned zebus, and the fleet springboks,
All ranging free as the birds in the skies,
Crop the sweet herbage that nature supplies.
The soft, modest grass is everywhere seen,
Spreading its carpet of beautiful green,
To cover the scars man makes in the earth,
And smooth o'er the soil that giveth it birth.
When hoofs of war horses trample the soil,
In the rage and strife of battle's turmoil,
When war's iron storm tears up the fair plain,
And ridgeth it o'er with graves of the slain,
The soft grass, in pity, spreads o'er the scene,
Covering it up with its mantle of green.

SEASONABLE FACTS AND SUGGESTIONS.

TOMATO PLANTS IN FRAMES.—It frequently happens that tomato plants in frames grow so tall before the season arrives for setting them out, that they touch the sash, and I have frequently seen the sash propped up to afford them more room. A much better course to pursue is to cut off the tops of the plants. This causes the plant to throw out lateral branches, and instead of a tall, lank, top-heavy plant, you have a strong, stocky one, that will thrive when set out.

CLIMBING VINES.—A neat method of supporting climbers is to take a strip of two-inch plank, two inches wide, planed the full length of the board, and painted green, which set firmly in the ground. Next, obtain from a wooden ware or toy store, two children's hoops, one the largest, and the other the smallest you can find. Now suspend the small one as near the top of the pole as possible, by strings, and fasten the large one close to the ground. Plant your seeds around the outside of the large hoop, and when up, run strings of soft twine regularly from the top to the bottom hoop. It will look better to have the hoops painted green, and the twine should be dark, and not cotton twine.

PHLOXES.—It is strange that this beautiful class of herbaceous perennials is not more generally cultivated. More attention is paid to the growth of them than formerly, it is true; but still there are very few gardens which boast of more than the two old varieties of white and pink phloxes, known by most persons only as the "French Willow." These persons may be surprised to know that there are several hundred distinct varieties now cultivated. Elwanger & Barry, in their catalogue for the present year, have one hundred and fifty-five named phloxes. The period of flowering has been gradually extending, until it reaches from July 1st to the time of severe frosts. There are also several sorts of creeping phloxes, blooming in May or June, and which propagate themselves by runners.

The phlox, in all its varieties, is perfectly hardy, and requires no care whatever, except that the plants should be divided (either in the fall or spring,) every three or four years.

The Phlox Drummondii is one of the most beautiful annuals, (we are almost tempted to say the most beautiful,) with which we are acquainted. Grown in a mass in a border by themselves, nothing can exceed them; as they embrace every variety of tint, and are in bloom for a period of at least three months.

ASHES FOR POTATOES.—Rufus Brown, of Chelsea, Orange county, Vt., says that in an experiment tried by him, the gain in the crop of potatoes by the use of ashes at the rate of a teacupful to the hill, was about a bushel and a half of potatoes for each bushel of ashes used. The kind of potatoes was the "English Pink-eye," and yield 200 bushels per acre. The ground was planted May 7th, with the ashes in holes, and a little dirt over them. It was plowed and hoed June 18th, the rows being four feet apart and the hills three feet. The ashes cost 12½ cents a bushel, and potatoes sold at 35 cents, returning full 50 cents a bushel for the ashes employed.

SOWING PEAS.—S. R. Elliott, of Cleaveland, writing to the *American Farmers' Magazine*, says: "Some years since, I commenced sowing peas, and covering them at different depths, varying from one inch to one foot. I found those buried eight inches deep appeared above the ground only one day later than those buried only two inches; while those that were covered twelve inches deep were a little over two days behind. As they grew, no perceptible difference was noticed, until they commenced blossoming and setting, then the advantage of the deep planting exhibited itself; for those that were eight and ten inches deep continued to grow, blossom, and set pods long after those only two to four inches commenced ripening and decaying. If the soil is light and loamy, I will hereafter plant my peas eight to ten inches deep: if the soil is clayey, I would plant six inches. I never earth up, but leave the ground as level as possible."

The *Michigan Farmer* says "peas may be planted on any good, dry soil at the earliest moment after the surface is thawed out enough to give earth sufficient to make the furrow in which to sow them. The varieties which we would recommend to sow first would be the *Early Kent*, *Dwarf Blue Imperial* and the large *White Marrowfat*. These three varieties, if all sown on the same day, will give a complete succession of this desirable vegetable."

TAR ON POTATOES.—A. B. Dickinson stated, at a meeting of the New York State Agricultural Society, that the practice with the potato was to select out the heaviest, as the best to withstand the blight. He tested his potatoes by putting them in very strong brine. Those that were the heaviest were the best to grow. He cut his potatoes into pieces of two eyes in each. He also stated that he had not planted or sown any kind of seed for ten years without a coating of tar, and in preparing his potatoes for planting he dissolved one pint of tar in three pails of boiling water, and added four pails of water afterwards. This solution he either poured over his seed potatoes, so that each got a coating, or the potatoes were dipped in it and then sprinkled with plaster. He stated that he formerly had no trouble in raising five hundred bushels per acre, but of late he could not do this. Though one year he had raised at the rate of four hundred and fifty bushels per acre, yet he seldom averaged above three hundred bushels.—*Michigan Farmer.*

SEED POTATOES.—B. K. Williams, of Cold Water, Mich., states that he has been experimenting upon seed potatoes for several years, and he finds one-quarter of the seed generally used is an improvement. From one to two eyes in a hill, he says, will produce more potatoes, of more even size, and less subject to decay, than any larger amount of seed. We think our farmers generally have been tending to the same theory for several years, although they have not perhaps carried it to that extent. The English and Irish farmers say that we use three times the seed they do, and that as a consequence we get more small potatoes and less large ones than they do, and not so good aggregate crops.

RURAL ARCHITECTURE.

DESIGN FOR A SUBURBAN RESIDENCE, WITH GROUNDS, BY GEO. E. HARNEY, LYNN, MASS.

DESIGNED AND ENGRAVED EXPRESSLY FOR THE NEW ENGLAND FARMER

In connection with a former plan, we ventured a few hints regarding cottage grounds, with a promise that at some future time we should offer plans for laying out such grounds, showing the location of the buildings, foot-paths and roads, and the proper method of arranging the trees, shrubbery and flowers, so as to produce the best effect, and as a favorable opportunity now offers itself, we know of no more seasonable time for redeeming the promise.

We therefore give at this time, in season for its suggestions to be adopted this year, a design for a simple cottage, with its plan, and the plan of the lot on which it is situated.

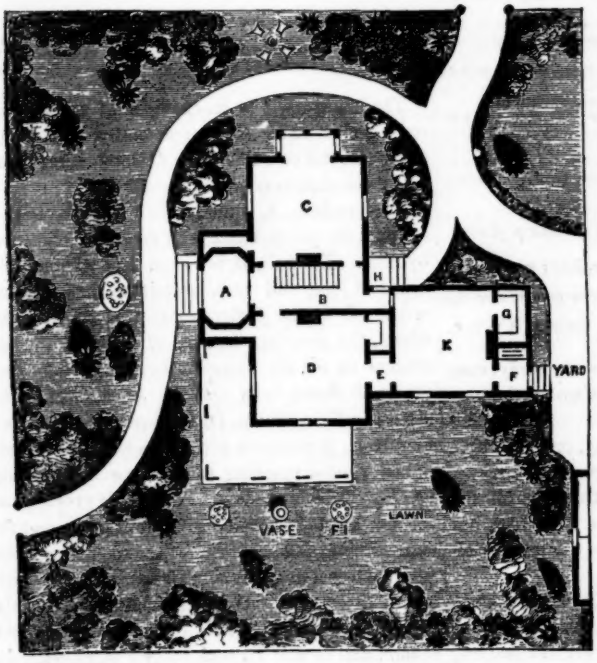
This lot is supposed to be located either in the suburbs of some city, or in some country village, where a considerable population has centered—in the neighborhood of schools, churches and stores—facing the village green, perhaps—at all events, in some locality where the lots are larger than the city affords, though more circumscribed than those we would find in the open country.

It is at the intersection of two streets, and comprises between an eighth and a quarter of an acre, devoted to ornamental purposes alone, the kitchen garden and domestic offices being in the rear, and not included in our present plan.

The dwelling stands back thirty feet from the street, on a slightly elevated spot, which slopes gradually away to the boundaries. A foot-path, five feet wide, starting from the front gate, passes the front entrance, and finally terminates in the open yard in the rear. This, with the carriage-road, which leads from the side gate to the stable, is the only path we have introduced on the plan, nor is it desirable to traverse the whole lot by gravelled walks, tending as they do to diminish its apparent size by bringing the boundaries nearer the eye, and involving a considerable outlay of money and time in making and keeping in order. It is, however, of great importance that what paths we do make, should be made in a thorough manner at the outset. In order to have a perfect road, the soil, in the first place—after the curves have been marked and the lines run—should be excavated from eighteen inches to two feet deep, and all the loam taken away and spread upon some part of the garden; then this ditch should be about half filled with any small stones which may be picked up here and there about the place

and the whole filled up to the desired height with the best gravel that can be procured, taking care to make it a little higher in the centre than at the two sides—say a couple of inches in the five feet path—in order that the surface may better shed what water does not soak through into the drain, and finally, the whole may have a finishing coat of blue screened gravel, evenly spread, and well rolled, and with proper care we shall have at all seasons, firm, dry and clean walks.

The foundation of the ornamental portion is smooth, green lawn, extending to the boundaries on either side, which are hidden by plantations of evergreens and shrubbery, with occasionally a deciduous tree introduced to produce a variety, and give character to the whole. They are mostly arranged in irregular clumps, connected together by other shrubs and evergreens, and planted with a view to obtain as great a diversity of outline as possible, and heavy masses of foliage and flowers, from spring to late in the fall. The clump on the right of the front gate is composed principally of tall growing shrubs and evergreens. In the corner is an American Mountain Ash, the color of whose red berries contrasts well with the heavy green of the two Norway Spruces, one on each



PLAN OF FIRST FLOOR, WITH GROUNDS.

side or it. Close to the path is a large, flowering Syringa, and in front some low, bright flowering shrub, such as Rose Weigela, Double Tree Peony or Double Dwarf Almond, while farther back near the fence, are a tall Purple Lilac and a Tartarean Honeysuckle. From this clump the range to the stable is as follows: a row of half-a-dozen evergreen trees of good size near the fence—two or three deciduous trees at convenient distances, and between, and forming the clumps, are Purple and White Lilacs, Altheas, Honeysuckles, Syringas, Hawthorns and Laburnums, while the foreground is made up of specimens of the Spirea, Rose Weigela, Japan Quince, Pink Mezereum and Fragrant Currant.

Near the corner of the stable is a group of three or four Evergreens, and between it and the corner of the dwelling-house there is a clump made up of a couple of Firs, an American Mountain Ash, and in the shade underneath, heavy plants of the rose-colored Kalmia and Rhododendron.

In the centre of the lawn is a single specimen of the Larch, which will here have ample room to show its graceful form and light, airy foliage to the best advantage.

Returning to the gate, we have on the left a Sugar Maple and a Scarlet flowered Hawthorn, surrounded by a white Persian Lilac, a Rose Weigela, a St. Peter's Wreath and a Fragrant Currant. Beyond this, and close to the fence, is another specimen of the Scotch Larch, and a little beyond, a Maple or Tulip, or some other deciduous tree of graceful form.

In the corner range, we might have first a Venetian Sumac or Fringe Tree—desirable on account of its brilliant yellow flowers—and near it one or two plants of the Persian Lilac, or white Mezereum. A Tulip tree near the corner, forms the central point of this group, while beyond it, and along the side street, are a Syringa, a red Strawberry tree, a Catalpa, and a mixed Althea, besides a couple of Evergreens and smaller shrubs to fill up the front.

Next comes an area of lawn and flowers, with a view across, into the street, from the bay window, and beyond this, extending to the carriage-road, another group is made up of a Larch, a broad-leaved Laburnum, a tall Silver Maple, Persian Lilacs, and a trimmed Arbor Vitæ tree, with a Fragrant Currant and a Double Dwarf Almond in the foreground.

On the opposite side of the road, we have a Rose Weigela, a white Japan Quince, a tall Ca-

talpa and a couple of Evergreens. From this group an Arbor Vitæ hedge extends to the pump, and will in a few years separate, and partially hide the kitchen garden from the more ornamental portions. A tall Norway Spruce or a White Pine should be set where indicated on the curve of the road, as a reason for making the curve as prominent as we have.

With this we have completed the arrangement of our shrubs. The following list shows the size, color and habits of those we have introduced upon our plan:

Althea, *Hibiscus*—Flowers in August; variety of colors, 4 to 12 feet.
Catalpa—Flowers in July; large white flowers, good for groups, 10 to 15 or 20 feet.
Hawthorn, *Cratægus*—June; white and scarlet, double, 5 to 20 feet.
Laburnum, *Cytisus*—July; rich yellow, 10 feet and upwards.
Honeysuckle, *Lonicera Tartarica*—May; variety of light color, 8 to 10 feet.
Lilac, Common, *Syringa vulgaris*—May; white and purple, 10 to 15 feet.
Lilac, Persian, *Syringa Persica*—May, white and purple, 3 to 5 feet.
Sumac, Venetian, *Rhus Cotinus*—Sometimes called Fringe tree, Aug. and Sept.; bright yellow, 8 to 12 feet.
Syringa, *Philadelphus*—June and July; white, 4 to 8 feet.

The above answer for back-ground shrubs. For the foreground we have:

Double Tree Peony, *Paonia Moutan*—May; red, white, purple, 3 to 4 feet.
Double Dwarf Almond, *Amygdalus pumila*—May; beautiful rose, 3 to 4 feet.
Japan Quince, *Cydonia*—April and May; scarlet and white, 4 ft.
Fragrant Currant, *Ribes fragrans*—May; bright yellow, 3 to 4 feet.
Mezereum Pink, *Daphne Mezereum*—April and May; pink, 3 ft.
do. White, do. do. *Album*—do. do. white, 3 ft.
Spirea, Double, *S. prunifolia plena*—June; white, 4 feet.
Spirea, Douglass, *S. Douglassii*—August; fine rose, 3 to 4 ft.
St. Peter's Wreath, *S. thalictroides*—June, July; small white, profuse, about 4 feet.
Rose Weigela, *W. Rosea*—June; pink and rose color, 4 to 5 ft.
Common Privet, *Ligustrum Vulgare*—June; thick, close, white, 5 to 6 feet.

The following do well in shady or damp places:

Mountain Laurel, *Kalmia latifolia*—June, July; very rich red, 4 to 6 feet.
Holly, *Ilex opaca*—June; scarlet berry, slow grower, near the ground.
Rhododendron—July; very luxuriant, rose or white, 8 to 10 ft.

All of the above named shrubs are hardy, easy of culture, and may be procured at any of the nurseries near Boston. The best time to transplant would be about the middle of May, or at the time when the new buds have just begun to grow.

We would not recommend setting out all the shrubs designated on the plan, the first year, but rather let this year's operations be the foundation from which to work in future.

If the buildings are already built, or their positions located, finish up the roads and paths, and as much of the lawn as possible, set the hedges, the larger trees and the principal background shrubs. Let them get well started, and their forms and outlines in a measure determined, and then, by another spring, perhaps, set out the smaller foreground shrubs, so that they may fill up the space, left between the others, and thus form, when fully grown, thick masses of foliage and flowers from the trees down to the grass.

Flowers may be cultivated wherever a suitable place offers itself. We have marked the positions of a few of the principal beds. Around the house are four large beds of standard roses, which should be selected so as to offer a variety of color and a constant succession of flowers throughout the season, and in other spots are figures cut in the turf and filled with attractive flowers. At the right of the veranda are two circular beds, one for mixed petunias and the other for mixed verbenas, and between them is a vase for myrtle. The large oval bed in front of the house may be filled with tea roses, fuschias, balsams, asters, heliotrope and mignonette, and the five beds opposite the bay window (one each,) with scarlet geraniums, amaranths, feverfews, dwarf coreopsis and nierembergias, the first named forming the centre bed, and the yellow and purple of the second and fourth alternating with the white of the third and last; and in other places we may have separate beds of candy tuft, phloxes, portulaccas, yellow lantana, mignonette, carnations, tulips, ageratum, &c.

For climbers for the veranda posts, bay window, and door lattices, we have the choice of the following:

Chinese Wistaria; a delicate purple, and very luxuriant.
Virginia Creeper; very hardy, with beautiful autumnal foliage.
Trumpet Honeysuckle; red and yellow, flowers all season.
Prairie Roses; beautiful double flowers, and a variety of colors.

The house itself is an example of the simplest rural gothic style. It is one and a half stories in height, and contains three finished rooms below and three chambers on the second floor.

The vestibule, A, is approached from the terrace through the pointed arch and measures eight feet by nine. The hall, B, is seven feet wide and fifteen feet long, and contains stairs to chambers and cellar. C is the parlor, measuring fourteen by fifteen, the principal feature of which is the bay window on the side opposite the door, overlooking the small flower-beds and the side street. The dining or living-room, D, measures also fourteen by fifteen; it connects with the veranda by a mullioned window reaching to the floor and opening like the French window. A closet is provided at the side of the vestibule in the front gable and for china, &c., at the other end of the room, furnished with shelves and drawers. The passage, E, which is also fitted with shelves, communicates directly with the kitchen, K. This room is thirteen feet square, and is well lighted by two windows. At the left of the chimney a door opens into a large store room, G, and at the right another leads to the pantry, F. We here have a sink and pump, with a closet and shelves for tin ware. A door opens directly into the yard.

On the second floor, the two principal chambers

measure each twelve by fourteen, and the other, in the gable, ten by thirteen.

This cottage is designed to be built of wood, covered in the vertical and battened manner, and finished inside and out with mouldings of a simple gothic pattern, and will cost, in the neighborhood of Boston, from $1300 to $1600.

EXTRACTS AND REPLIES.

CALEDONIA CO. (VT.) AGRICULTURAL SOCIETY.

At the Society's annual meeting, held in January, the following officers were chosen for the year ensuing:

President—HORACE FAIRBANKS; *Vice Presidents*—Harley M. Hall, James D. Bell; *Treasurer*—George C. Barney; *Secretaries*—Horace Paddock, T. M. Howard.

The committee on butter reported that David Currier, of Peacham, was entitled to the first premium. He made from nine cows (four of which he called heifers,) 1729 lbs., being an average of 192 lbs to the cow.

The first premiums on field crops were awarded as follows:

Wheat—Stephen Richardson, Waterford, 36 4-9 bushels per acre.

Corn—George Goss, Barnet, 146 bushels of ears per acre.

Oats—David Currier, of Peacham, 69½ bushels per acre.

Potatoes—Wm. D. Rollins, Waterford, 410 bushels per acre.

Turnips—David Currier, Peacham, 346 bushels on 28 rods.

Carrots—J. B. Kinerson, Peacham, 47 bushels on 6 rods.

Barley—J. O. Moore, Peacham, 57 bushels per acre.

Other reports were brought before the Society, which, together with further proceedings of the meeting, are of less interest to the general reader.

I. W. SANBORN.

GREAT RYE CROP.

I send you the facts of a rye crop grown last year by me on one acre and a half of ground. The yield was so large I thought it worthy of notice, as you like to hear of good crops. I sowed three bushels and cleaned up seventy bushels by measure. I think, had it been weighed, it would have overrun even that. J. C. S.

Shoreham, Vt., Feb., 1862.

PLAN OF A SHEEP BARN.

Having followed some of the valuable suggestions that have appeared in your paper, I cut the last year double the hay I did the year previous. I value your paper very highly, and believe one of the best ways to make farming profitable is to take the *Farmer*, and follow its friendly advice. One single copy to me is often worth double the price it costs.

Will some of your numerous correspondents give a plan of a sheep-barn with sufficient capacity to accommodate two or three hundred sheep, to be situated on level land, with necessary details as to apartments, sheep racks, &c. A description of such a barn would much oblige me, for I am now getting out lumber for one, and shall put it up in the spring. A SUBSCRIBER.

Romney, N. H., Feb., 1862.

REMARKS.—We hope some of our friends will communicate the information desired in the above communication, as it is needed by many persons.

FAT COW.

The heaviest cow sent to market from Old Caledonia the present season was sold by Messrs. Bigelow, of Lyndon. Its live weight was 1560 lbs. —dressed 1005 lbs., and had 121 lbs. of rough tallow. There are heavier ones still in the country, waiting their time. I. W. S.

THE APHIS.

Will you, or your entomological correspondent, Mr. F. G. Sanborn, favor us through the *Farmer*, with a brief history so far as known of the aphis—the insect everywhere present of the past season—and oblige other readers as well as

Lyndon, Vt. I. W. SANBORN.

NEW PUBLICATIONS.

THE PRINCIPLES AND PRACTICE OF LAND DRAINAGE; embracing a brief history of Underdraining; a detailed examination of its Operation and Advantages; a description of various kinds of Drains, with practical directions for their construction; the manufacture of Drain Tile, &c. Illustrated by nearly 100 Engravings. By John H. Klippart. Cincinnati: Robert Clarke & Co. 1861.

This is an excellent work upon the subject of drainage, written by a person conversant with the subject, and who was willing to go so far into details as to give the reasons why withdrawing water from the soil, tends to make the soil, *deeper* and *warmer* and *more moist* in a dry time, than an undrained soil. It is written in a plain, candid manner, and cannot fail to be of essential service to those who will read and practice its precepts. The subject is one of great importance to our farmers, and demands of them more attention than it has yet received.

ITEMS FROM THE PATENT OFFICE.—Forty per cent. of the letters received at the Agricultural Bureau call for seeds of cotton, tobacco and sorgho. The county of Jefferson, in Iowa, has produced this year 75,000 gallons of sorgho molasses, and 5000 lbs. of sugar. With this result, after three or four years of cultivation, the agriculturists there propose to go into the thing largely.

The same Bureau has just received a large lot of the finest variety of tobacco seed from Havana; also, seeds in abundance of the finest Maryland varieties.

Investigations concerning what is called the "perennial cotton tree" do not go to establish statements concerning it which have appeared in New York publications.

SCALDING ONION SEED.—A correspondent of the *American Agriculturist* writes that a paragraph has been going the rounds of the papers to the effect that scalding water poured upon onion seed will cause it to germinate in a few minutes. He tried it, and lost all his first planting, not a seed coming up.

LEGISLATIVE AGRICULTURAL SOCIETY.

REPORTED FOR THE FARMER BY D. W. LOTHROP.

The fourth meeting of the series was held on Monday evening last, at the Representatives' Hall, and the subject for discussion was—*Neat Stock—the adaptation of different Breeds to different localities and purposes.* Mr. SANFORD HOWARD, of the *Boston Cultivator*, was present, according to announcement, and presided.

He observed that the subject had been frequently discussed before at these meetings, and as he had engaged in the discussion, he was prompted to excuse himself for speaking again. The subject was important, as no nation has attained to a high state of agriculture which does not make this a prominent division of its system. All our domestic cattle are of one species, and indigenous to Europe. In this country we have two native species, the bison and the musk-ox. The bison is a valuable animal and should be preserved, but he is not a good beast of burden. The speaker alluded to some experiments of a gentleman in Mississippi for the domestication of this animal, but found he could not be made serviceable; yet by crossing with this animal a better ox would be produced than cow.

Most of our cattle have been derived from Europe—some from the continent, others from the British Isles, and a few from Asia. By a law of nature, no one breed of cattle is adapted to all localities. He cited the different breeds in Great Britain, and observed that some of these breeds had maintained their purity for a long while. Those on the plains cannot subsist on the mountains, with coarser and less abundant food. Mr. Howard here alluded to the various crossings of different breeds, by cattle raisers, and observed that unless we take pains to breed uniformly, while we might produce some good accidental animals, we could get no breed. Much could be learned by reference to the principles of breeding in England, where cattle are raised with an adaptation to soil and to climate. Cattle not mixed should be regarded as aboriginals. In England they had two specimens of the aboriginal or wild breed. He had examined 100 head, belonging to the Duke of Hamilton, which dated back over a hundred years, and had been guarded against intermixture, yet they have not degenerated, nor will they for all time.

Of breeds prominent in England stand the Devons. They were introduced here in 1816–17, and are divided into two kinds, the North and the South. The South Devons are not superior for dairy purposes, but are used generally for beef. In New England the Devons are used for labor, and they fatten well on light soils, and are fair milkers. The Herefords are good for beef, but not valuable for milk. The Long-Horns were a breed common in some parts of England, and were much improved by Mr. Bakewell. They were early introduced into Maine, were good workers, hardy and long-lived, and good for the dairy. The Galloways do not succeed for ordinary purposes, but are fitted for a locality. They were of good size, sometimes measuring eight and nine feet girth, and could produce 1600 lbs. of clean beef. Had been introduced into Canada, where they were bred chiefly for the butcher. The West Highlands were a hardy cattle, had long, shaggy hair, with an under fur which protected them from cold and rains in their native place, where they sometimes gathered their own food. They might do well in the Western States. The Kerries were a valuable, small aboriginal breed common in Ireland, and if the people were deprived of them would be obliged to fill their place with the goat. They possessed great power to endure inclement weather. Mr. A. W. Austin, of West Roxbury, has some of this breed, whose milk is about four quarts per day, and very rich. They weigh from 500 to 700 pounds. Another aboriginal breed in Great Britain is the Channel Island, or Jersey cattle. They give the richest milk known, and on the Channel Island, are raised exclusively. We have some good crosses here. The Short-Horns, or Durhams, Mr. H. regarded as an artificial breed, as they were produced by a mixture under the care of Charles and Robert Collings, whose improved herd sold at a great price. The improvement upon the old Short-Horns was evident in greater symmetry of form, richness in milk and fineness of flesh. In fact, on fertile soils they are the very best for beef. Mr. Howard, however, thought that in England crossing had been carried too far, and cited some instances. Another artificial breed was the Ayrshires. In 1780 the nucleus existed in Ayrshire, and in 1790 it had assumed so good a character as to be considered a breed. It is the only dairy breed now in Scotland, is increasing in England, and its introduction is recent here, though some of our herds number from 20 to 70 head. The Rump cattle of India were alluded to and recommended for the Southern States of America, as they stand heat well. They were also good in the harness, and would trot off almost as well as a horse. Mr. H. concluded by a request that gentlemen would give us some facts in relation to the various breeds of cattle, and said the meeting was open to remarks from any one.

Mr. STEDMAN, of Chicopee, spoke to the point, how we could furnish ourselves with the cattle we need. Our natives are "no breeds." Shall we improve these or procure foreign breeds? He thought it best to cross our cows with the best bulls of pure foreign stock, and said the Devon crossed with our native stock very much improved the latter. We should cross, and continue and

persevere in crossing, to produce good results. He spoke of the 180,000 cows in this State in 1855, and thought that by proper intermixture of blood such a herd might have been increased in value as much as five dollars apiece. He deplored the existence of bad bulls, and intimated that they should be "summarily treated" by law, as in the West. The Durham cross with our natives he regarded the most valuable—the Short-Horns excellent for beef.

Mr. SHELDON, of Wilmington, being called upon, said he had spoken much upon this subject before, for the past twenty years, but it might bear repeating. His knowledge now was the same. For working oxen he thought the North Devons the best, and for fattening, the Durhams. In regard to cows for milk, he said we should pay no regard to breed, and recommended the natives. He spoke of some excellent ones which he possessed, and said he lost one valuable cow by trying *to dry her!* He also alluded to the external signs of a good ox. He should have large nostrils, a hazel eye, rather slim horns, toes straight out before him, and bosom full. Rather than be controlled by breeds, he would sooner run his risk blindfolded at a market, in the selection of good cattle, as he had great confidence in "feeling." In speaking of his own stock—their lack of daintiness, easy feeding, &c., he said he gave some of them to a neighbor to winter, who, mentioning one of them, said "she was a fool, for she didn't know the difference between meadow hay and the best herdsgrass!" Upon inquiry by Mr. Stedman what bull he would choose, Mr. Sheldon replied, "the best he could find!"

Mr. HOWARD spoke of Mr. Sheldon's stock, and commended some of them as excellent natives.

Mr. SHELDON gave a statement of a man who wanted him to fatten a cow, or to buy her. He took her, gave her two bushels of turnips and four quarts of meal per day, and English hay. Yet she fell away in flesh and in milk! The butcher took her, and as she served him the same way, he made way with her before she was still leaner! Mr. S. said, also, that his own young cattle were slight eaters. He referred to the physical points of a good cow: flat horns, lean face, hollow ribs, or open below the last ones, medium-sized bag, and well-shaped, though not large teats. As to color, he preferred a light brindle.

Mr. DAVIS, of Plymouth, found a cow in the woods, which seemed to possess all the good marks of a fine animal. She had been brought up by a Marshpee Indian, and Mr. D. bought her. But her horns were long and tiny, and he was disappointed in her. Mr. Sheldon's feature of the "flat-horns" he thought a good one He spoke of the importance of blood bulls, and intimated that agricultural societies should offer premiums for them. He thought the bull had more influence on offspring than the cow; a good bull produces a good cow. The Oakes-cow heifers were worth nothing. And he had had experience that an excellent cow was quite likely to produce a bad calf. The cry that good bulls ouly benefited the fancy farmers was unfounded. He advised those interested in such matters to look into the English books for authority.

Mr. SHELDON said, in reply to Mr. Davis's theory concerning the influence of the bull, that he differed from him, as he had got better heifers from good cows than from good bulls.

Mr. WETHERELL, of Boston, said that in breeding, the blood on one side should be full. Farmers do not wish to breed from grade sires. With a good bull you are sure to get a good calf. The Short-Horn improves every stock, and it is the bull which exerts the dominant influence. There existed some good grade stock, but it has no certain identity. He alluded to "scrub bulls" running at large in Illinois, their pernicious effect upon stock, and the interference of the Legislature. Our State should not allow a grade bull in its dominions. The product of the Short-Horn is the best, and we should have this stock for the beef.

Mr. HOWARD said some of our best stock were grades. And in England, where they can maintain their identity, they are a breed. He cited experiments on sheep. The Leicesters were once a grade, now a breed.

The hour for closing having now arrived, Mr. STEDMAN moved that the *same subject* be continued for discussion at the next meeting—which motion being sustained, the meeting adjourned.

USE OF FAT.

"What is the use of fat?" It performs several offices; one is to round the system and complete the beauty of the person. Your cousin Jane's smooth neck owes its beauty to the skilful manner in which the adipose matter is packed into all the crevices between the muscles, veins and arteries. For nature expends no small amount of labor in the production of beauty. "Behold the lilies of the field; not Solomon in all his glory was arrayed like one of these!" Another use of the adipose matter is to serve as a reservoir of aliment for the support of the system. In the fever which I recently had, my stomach was in such a state that it could digest no food, and by one of those beautiful adjustments so common in nature, my appetite rejected it, and I did not eat a mouthful for several days. The consequence was that the heat of the body had to be kept up by burning the fat in the system, and how rapidly this was consumed! I suppose I lost twenty pounds in the course of three days. Hibernating animals, that sleep through the winter, are generally as fat as they can be, when they crawl into their nests in the fall. Their thick furs prevent the radiation of heat, so that little is required to be generated;

their breathing and circulation are sluggish, causing a slow consumption of matter, and this matter is supplied by the store of fat in the system, which is slowly burned up during the winter, and the animals come out in the spring as lank as Pharaoh's lean kine. If you put a piece of fat on the fire you will see that it burns with a blaze. Whenever any organic substance burns with a blaze you may be almost sure that it contains hydrogen. The burning of a substance is simply its combination of oxygen. Whenever an organic substance containing hydrogen is sufficiently heated, it is decomposed, and, as the hydrogen is separated from the other elements, it takes the gaseous form. Rising in this hot state, as it comes in contact with the oxygen in the air, it combines with it—in other words, burns; one atom of oxygen combining with one atom of hydrogen, and producing water. There is phosphorus in the bones, which, when separated, will burn with a flame, but, almost invariably, when you see any animal or vegetable substance burning with a blaze—the flame of a lamp, of a kitchen fire, of a burning building—it is hydrogen in the act of combining with oxygen, producing water. On the other hand, when you see any organic substance burning with a red heat without blaze, like charcoal or anthracite coal, it is carbon combining with oxygen, and producing generally, carbonic acid. If the blaze produces a good deal of light, you may be pretty sure that the substance contains both carbon and hydrogen, the light coming principally from the intensely-heated carbon before it is burned.

PREPARATION OF FARMING IMPLEMENTS.

The spring is a proper season for looking up and putting in complete repair the various implements required in the management of the farm. As the late spring is a busy season, it ought to be a standing rule with the farmer to supply himself beforehand with the various implements necessary to prosecute his work profitably. There are few farmers, probably, who are not possessed of sufficient mechanical skill to supply for themselves many of the utensils used on the farm. "Economy is wealth," says the old adage, and it certainly is strict economy to make numerous trifling repairs to the common implements of the farm at home, rather than to send them away, where the cost of travel and delay would be more than the repair itself. But all trades must live, and we shall find that community the most prosperous where the different avocations are sustained by the calls upon each other. Where such is the case, the farmer, as well as the mechanic, the manufacturer and merchant, are all accommodated, the wants of each being at once supplied at home, so that the whole community feels the quickening impulse, and prospers upon it.

Some recommend that the farmer shall make some of the implements himself, which he uses—such as plows, harrows, or any of the coarser implements. We cannot think this good economy, because there never is a time upon a well conducted farm, when there is not plenty of work to be done, directly applicable to the farm itself. The putting of a new handle to a rake or a hoe, slightly repairing a broken plow, harrow, or wheelbarrow, may be done by the farmer well enough, and perhaps quicker than he could harness and take either of them to the wheelwright or blacksmith. This would be good economy—and such a practice will justify the purchase of a variety of tools, and the providing a comfortable room and bench where they may be used.

A skill sufficient to make such repairs will sometimes enable a team to go on with the work—and perhaps at a pressing time—when otherwise, it might be necessary to turn it out and make it difficult to get it together again.

For the New England Farmer.

AMONG THE GREEN MOUNTAINS.

MESSRS. EDITORS:—January, the first month of the "New Year," is already numbered with the past; February, the shortest of the twelve, is ushered in, and soon merry spring, the season of birds and of flowers, will be with us again. The earth is quietly reposing beneath its comfortable coverlid of light snow, to prepare for the increase which is said in the promise she shall bestow on man from her bountiful lap,—that seed-time and harvest may not fail those who put forth a manly hand to secure its manifold blessings.

The cold of February may be sharp and piercing, and many of its days boisterous and uncomfortable, and as the poet says, of all the months the least honored and sung; still, it has its pleasures in realization as well as in anticipation, and forms an essential link in the grand chain of months which forms the annual round, for present survey and usefulness, and if properly employed, for future gain and enjoyment. Opportunity is offered for public entertainments, readings, lectures and discussions, and social, fireside chit-chats. Reading-rooms should be frequented, public and private libraries perused, and useful, practical information stored in the mind for future use. No time in the year is better fitted for investigation and study, especially with the farmer, than now. His year's supply of wood is at the door, (or should be,) his grain all threshed, and properly and wisely stored away beyond the reach of the mischievous rat and mouse, and all his "winter work" so well advanced as to give him time for leisure, and rest from the fatigue of outdoor labor.

Let now these leisure hours be properly guarded and cherished; let him appropriate them to his own advantage, by the acquisition of knowledge and general intelligence—such knowledge as will be of especial use to him in his vocation in life, and give him a good understanding of passing events.

The wise and prudent farmer will, in anticipation of the approaching season of activity and toil, now arrange, so far as practicable, all his plans for the farm work of the spring; see that his seed, and that of the best quality, is provided; that his tools and teams are ready for use, and in good

condition for the work before them; then, when the seed-time arrives, the seed will be ready for the sower, the sower prepared for his labor, with a fair prospect before him of realizing in full the important truth, that the work at hand well begun is half done.

Be not idle, then, because of the cold or the storm without. Let the mind be free and active —continually expanding and enlarging as the result of increased thought and study. Hail the storm-king as he whistles by our dwellings; bid Boreas go on his way rejoicing, and make lionish February and March laugh right merrily, by tickling their ribs with the feather of pleasantry and good humor; prompt them by an example of industry and humanity, and thus be enabled to witness at least the happy contrast between the rough and frigid without, and a calm, quiet and sunny within. I. W. SANBORN.

Lyndon, Vt., 1862.

ST. JOHN'S WORT FOR THE FARMERS.

Every well-directed effort to promote the agriculture of the country, we hail with sincere pleasure. We are willing, even, that some errors should be risked, for the sake of being found on the progressive road. The establishment of an Agricultural Bureau at Washington might be of some advantage, if those who manage it would ascertain what plants are indigenous to our own soils, and which among them are worthy of cultivation and which are not—as well as to explore all the rest of the world for seeds that, perhaps, may be as much of a blessing as has been the chiccory or the Canada thistle! If those who manage affairs at the Patent Office are not familiar with our native plants, as well as exotics, it is possible that their labors may prove anything but a blessing to the farmers of the country. We have been led to these remarks by noticing in the last Patent Office Report a list of the plants which were intended for distribution from that branch of the government. We will give but one of them for the edification of our readers, just to show them that there is room for improvement even in that high department. We quote as follows:—

"PLANTS FOR DISTRIBUTION.

"ST JOHN'S WORT, (*Hypericum corymbosum.*) This shrub, though indigenous to the Southern States, is but little known throughout the country; yet is has proved hardy in the District of Columbia, and will probably succeed still further north. It is an ornamental shrub, blooming early in the spring. There will be a distribution of 3000 plants in the spring."

Now let us see what Darlington says of it, in his "Weeds and Useful Plants:" "This is a worthless and rather troublesome weed on our farms; and *ought to be diligently excluded.*"

If there is to be no more discrimination than this, between the useful and the noxious plants, at the Patent Office, its teachings will not stand as high authority among the farmers of New England.

For the New England Farmer.

ABOUT KEEPING GOATS.

Many persons who cannot conveniently keep a cow would find it profitable to keep one or two common goats. They require but little care, may be supported at small cost, and yield a good supply of milk of superior quality. A goat, well kept, will yield from three pints to two quarts of milk daily, for a large part of the year, the quantity diminishing in the cold weather as the time of kidding approaches. It is much cheaper to keep a goat in town than to pay a milkman, and families everywhere will find the milk very nutritive and wholesome, and especially good for children in most cases. An English writer estimates that two goats are equal to a small Shetland cow.

Goats may be very cheaply supported. If picketted in a pasture in warm weather, or allowed to be at large, they will pick up their own living, eating readily almost every sort of green thing. Grass, weeds, twigs of bushes, vegetables, fruits, nearly everything that grows, will suit their taste. They are fond of dry leaves, corn-stalks, horse-chestnuts, and even eat poisonous plants with impunity. If confined in a yard, or in closer quarters, they will take the scraps and waste of the kitchen. Some persons allow them to feed out of the swill-pail, but this practice cannot be commended. Cobbett says, in his "Cottage Economy:"

"When I was in the army, in New Brunswick, where, be it observed, the snow lies on the ground seven months in the year, there were many goats that belonged to the regiment, and that went about with it on shipboard and everywhere else. Some of them had gone through nearly the whole of the American war. We never fed them. In summer they picked about wherever they could find grass; and in winter, they lived on cabbage-leaves, potato-peelings, and other things flung out of the soldiers' rooms and huts. One of these goats belonged to me, and on an average throughout the year, she gave me more than three half-pints of milk a day. I used to have the kid killed when a few days old; and, for some time, the goat would give nearly, or quite, two quarts of milk a day. She was seldom dry more than three weeks in the year."

The same writer adds, that "goats will pick peelings out of the kennel and eat them. They will eat mouldy bread or biscuit; fusty hay and rotten straw; furze-bushes, heath-thistles and, indeed, what will they not eat, when they will make a hearty meal on paper, brown or white, printed on or not printed on, and give milk all the while?" I may add to Cobbett's list of odd delicacies by stating that my own goats have gnawed smooth the rough sides of my pile of hemlock bark, and have cleaned out all the powder-post from the sills of the wood-shed!

But goats, like most other animals, prefer clean food, and will not devour all the above-mentioned things if a supply of more desirable edibles is at hand. In the winter, it is well to lay in a few hundred pounds of hay—second crop is preferable —a few carrots and some fine feed. Indian meal is sometimes given to them, but it is too drying. They need water occasionally, but do not drink much.

The goat is one of the most hardy of our domestic animals, enduring easily all extremes of

heat and cold. It needs the shelter of a shed or barn in wintry and stormy weather, and will lie anywhere on the floor, preferring a board to a bed. Its natural activity and nimbleness, together with a capricious disposition, fit this creature to enjoy a state of freedom. When roaming wild, on its native mountains, it loves to climb the most dangerous and inaccessible places, clinging on the verge of precipices by its wide-spreading and sharp-edged hoofs, and defying the pursuit of the hunter. This inclination it manifests in domestic life, by scaling sheds, walls, wood-piles, &c., with great agility. But the goat will bear confinement extremely well, continuing in good health and yielding the usual quantity of milk. On shipboard it is healthier than any other domestic animal, and is highly valued on account of its sportiveness, its familiarity, and its ability to give milk upon such waste food as is there obtainable.

The milk of the female goat is sweet, rich and nourishing. It has the body and smoothness of cream, is viscid and strengthening, little productive of oil, but abundant in the matter of cheese. In tea and coffee it is far superior to cows' milk, and will go at least as far again in imparting color and flavor. In all kinds of cooking it is equally excellent. It has no peculiar or unpleasant taste and is not affected by what the creature eats. Onion tops have been given to the females, by way of experiment, without imparting an oniony taste to the milk. I consider two pints of goat's milk to be as good in a family, in every way, as three pints of cows' milk.

For most feeble and sickly children, as well as those in health, it is invaluable. It does not tend to form curds in the stomach, as cows' milk does, and is therefore frequently prescribed by physicians in cases of extreme weakness. It is sold for this purpose in Salem at twenty-five cents a quart. Invalids abroad often resort to the mountainous districts of Ireland and Scotland to derive benefit from the use of this article which is there known as "goats' whey." Mr. Colman noticed that the Irish mountaineers, about the Lake of Killarney, kept from one to thirty goats apiece, for the sake of the tourists to that delightful region. In Spain and Portugal, goats are abundant, and in Lisbon, their milk is more commonly used than that of cows. The goats in those countries are driven into the cities in the morning, and milked at the doors of the houses. The district in France most celebrated for goats is the Canton Mont d'Or, where, in a space not exceeding two leagues (six miles) in diameter, upwards of eleven thousand are kept, chiefly to supply the city of Lyons with cheese. There are several other interesting particulars relating to the goat, which I will give in another paper. G. L. STREETER.

Salem, Jan., 1862.

EXCHANGE OF SEEDS.—It is a good rule in agriculture, to effect a change of seeds as often as once in every two or three years. Why it is that the seeds of most of our field crops or grains do better when cultivated on lands at a slight remove from those on which they were matured, is a question which science has as yet been unable satisfactorily to solve; but such is the undeniable fact, and indeed is so obvious, and so clearly corroborated by all experience, as no longer to admit of doubt. The winter and early spring are favorable seasons for exchanging, as well as for procuring new and improved varieties of seeds, plants and scions.

ALPINE SCENERY.

In Switzerland there are thousands of places and objects of interest at every turn, and yet how few of them are seen or even heard of by that vast array of crusaders, who, alpenstock in hand, hunt after the magnificent! I will take one place, for example. Lying high back from the Lake of Thun, is the Justis-Thal, a narrow valley of singular grandeur and wildness. On either side, walls of rock tower perpendicularly two or three thousand feet; a gushing stream pours with giddy roar through its very heart; a straggling *chalet* may be met with here and there at long intervals; whilst huge boulders, torn by the action of time from the mountain-ridges, strew the few grassy spots in what it seems paradoxical to call a plain, and which afford scanty pasture to a drowsy flock of goats and cows.

But the most remarkable phenomenon of this scarred valley is the *Schafloch*, a huge ice-cavern, bored, as it were, in the solid rock, nine hundred feet above the level of the valley, apparently inaccessible to human approach. Neither the peasants of the village, nor the mountaineers, could give any account of the interior. The oldest inhabitant did believe that some bold adventurer in his younger days had reached it, but it was a dangerous enterprise, forsooth, and even that exploit had faded into tradition. Fortunately, on the outskirts of the town of Thun—it might have been at Hilterfingen, whose pretty church, on a beechen knoll, overlooks the bright waters of the lake—there dwelt, I heard, a middle-aged man, who had really once visited the cavern, but that was many summers ago, and who even boasted that his memory of the track still served him well enough to reach it once more. He would venture to act as guide, he said, should I or my friends like to explore that isolated region. "I will leave my wife and children in pledge with the syndic," he added, "if I don't bring you back again safe."

We wound slowly up out of the village by a zigzag pathway, at first broad enough for a horse to traverse. At last, after a four hours' ascent, we wended our way through what seemed to be a natural gate-way of the mountain, and suddenly confronted the valley of the Justis-Thal. A new scene now opened before us. A small plateau lay at our feet, which presented a scene of desolation it would be as difficult to forget as it would be to describe. In addition to the mighty boulders which seemed scattered about by the hands of giants, or the sons of Anak, struggling in an angry mood, it was evident that the spot had once been a forest. Some pines, towering a hundred feet, still stood erect; others had been snapped off midway, and their lofty heads dropped downward to the earth; others, again, lay prone on the ground, singly, or huddled together like corpses on a battle-field. But the most extraordinary phenomenon was their trunks and branches, which had been literally stripped of their bark. Some were black, as though scarred by lightning; others were already converted into the softest touchwood, which

crumbled into dust on the least handling. Everywhere the melancholy signs of decay and desolation presented themselves; and it required no stretch of the fancy to make us imagine we had reached the outakirts of nature.

At this point, the *Schafloch* was in full view, a mile or more in front of us; but how was it to be reached? There was no beaten track; the rock was almost perpendicular; the surface crumbled beneath our feet at every step, and the slightest mishap would precipitate us a thousand feet into the valley beneath. We embarked upon the crumbling *debris*, the dust of ages, and sank at once deeper than our ankles in the stony detritus. At every step, a mass of this uncomfortable and unstable *terrain* was set in motion, and it was scarcely possible to prevent ourselves moving downward with it. Occasionally the force of this sliding mass would communicate a locomotive impetus to a huge boulder, when might be heard a sound of something leaping and dashing from point to point, crashing through brakes and bramble, or the branches of trees, and at length plunging, with a voice of thunder, into some cryptic chasm, there to rest till doomsday. I had, however, learned to walk the mountain side; and notwithstanding the almost insurmountable difficulties of the track we had to traverse, I contrived, by the use of the alpenstock, which served as a kind of Blondin's balancing-pole, as well as the exercise of a nervous caution, to reach the entrance of the cavern.

It might be thirty feet high by forty wide, the roof rising internally, like a domed vault, until another twenty feet was added to the height. The threshold for fifty feet or so was strewn with the rough pavement of splintered rock, the sharp edges of which cut like the blade of a knife; or huge boulders, so smooth and slippery with perennial damp, that it was almost impossible to scramble over them; or, perhaps, a huge quadrangular slab, polished as a glass mirror, on a gradient of fifteen or twenty degrees, invited the foot only to betray. Not many feet beyond us, blazed innumerable stars, which glistened like spangles or diamonds in the ebon horizon.

From the roof the water had evidently oozed down from time immemorial. Its fall, however, had been arrested by an icy hand, even at the roof; as fresh streams from the rock above penetrated through, and trickled over the congealed surface, icicles grew and grew till they reached the ground, but instead of falling perpendicularly to the floor, they formed outward and bent inward. Interlacing these props, as it were, of a structure built from the top, frozen bands or branches, which intersected each other, created the most perfect trellis-work, or, more properly speaking, the most delicate filigree-work. The result was a scene of real enchantment, and I seemed transported, as in a dream, into the midst of an Eastern paradise. Kiosks, with innumerable minarets, or pavilions, or painted pagodas, or what you will, rose before me, vanishing away in the distance, all of the purest crystal. My guide likened the view to a pine grove clad in snow; but the illustration was feeble. It might have been better to have described it as a Gothic cathedral, the pillars in the nave being constructed of glass, and lit up from the interior; but even this similitude is faint and imperfect.—*Temple Bar.*

For the New England Farmer.

WEATHER AND CROPS IN VERMONT.

Snow in January—No Real "Hard Times"—Excellence of the Barley Crop—Fine Fat Hogs—Description of a Sheep Barn Expected.

MR. EDITOR:—Having a few leisure moments this stormy Saturday evening, I think I can do no better than to have a short chat with my brother farmers through the medium of what is emphatically the "*New England Farmer.*"

Up to about the middle of January there was hardly snow enough to make it good getting around in the woods, but now, like a railroad train behind time, it is putting in some of its best strides—having snowed seven of the last eleven days—and this winter will certainly be an exception if it does not make up all lost time before the middle of April.

Our farmers, I think, have as little cause for complaint in regard to the "hard times" as any class of people, for most of us, at least, have enough to eat, if it does take a bushel of oats to buy a yard of cotton cloth; corn plenty, oats plenty, potatoes plenty, wheat we don't mention in this vicinity, and a good yield of barley with those who sow it. And, by the way, I think this is a grain altogether too much neglected, in this section, at least, for the interest of the farmer.

Speaking of barley puts me in mind of some hogs killed last month by Mr. R. W. Toby, of this town, that were fatted on barley. They were slaughtered when 18 months and 18 days old, Were three in number, and weighed, when dressed, 636, 523 and 486 pounds. These hogs had no extra keeping; their feed the first summer being milk, and through the winter two pailfuls of raw potatoes per day. The potatoes were cut fine, about a quart of meal to the pailful put on top of them, and then boiling water sufficient to scald the meal poured on. Last summer they had nothing but milk, until the milk began to fail, after which they had barley meal.

Mr. Toby says he had rather have a bushel of barley than a bushel of corn, to feed hogs. A year ago last fall he butchered two pigs the day they were 9 months old, one of which weighed 358 and the other 337 lbs. I think you must acknowledge that he is "some" on pork, barley or no barley.

If I had time, I would like to give you a description of Mr. Toby's sheep barn. It is so arranged that each sheep is by himself; there is no crowding, no treading on the fodder, each sheep gets his own grain and no more. The arrangement is by no means expensive. Should you think it acceptable, I will at some future time send you a description of it. JAKE BOMSTY.

Calais, Vt., Jan. 25, 1862.

REMARKS.—Please send us the description you speak of. You may see an inquiry in another article for the plan of a sheep-barn.

PEAS WITH POTATOES.—A letter in the *Agricultural Gazette*, an English paper, states that a single pea inserted into each piece of potato that is planted, will produce a large crop of peas, and tend to check disease in the potato. It is a practice with some to plant peas with potatoes, here. The potato stems answer a good purpose for the pea vines to run upon.

LEGISLATIVE AGRICULTURAL SOCIETY.

REPORTED FOR THE FARMER BY D. W. LOTHROP.

The fifth meeting of the series was held on Monday evening last, at the Representatives' Hall, when the topic for discussion was that of the previous meeting—*Neat Stock—the adaptation of different Breeds to different localities and purposes.* Mr. STEDMAN, of Chicopee, one of the House Committee on Agriculture, presided.

The chairman, in making a few introductory remarks, said he did not advocate any one breed of cattle, as a general thing. Undoubtedly, our stock is susceptible of great improvement, but we need light to guide us in its amelioration. He alluded to the number and value of cattle in our State, and the great increase of value by judicious breeding; and he thought the true rule was to breed from the best males and females, without relying much upon grade stock. Mr. S. read from the old *New England Farmer* matters in point, of different importers of cattle, and the good influence their blood had upon our stock. He cited the "Chapin oxen," one of which, when slaughtered, weighed 1993 pounds. But beef is not the prime object of our farmers; the products of the dairy should not be overlooked. He alluded to some grade Short-Horns of Gov. Lincoln, of Worcester, and observed that they had fulfilled their expectations, as they were good for the dairy and the stall. This particular crossing, too, Mr. Fessenden had advocated. The speaker much deprecated grade bulls, and observed that their calves would resemble both the sire and the dam, but would be more of the bull. He opposed the offering of premiums for such bulls, and mentioned the Plymouth Agricultural Society, which had offered more for grade than for blood bulls; and the Worcester Society had offered the sum of $24 for the same. To show the superior influence of the male, Mr. S. cited a case where Gorham Parsons, of Brighton, had crossed the Angora goat with the common female, and a long-haired progeny was the result. He also alluded to the influence of the first impregnation of a cow upon all her future offspring; and hence the pernicious influence of scrub bulls He did not generally favor Lynch law, but if Judge Lynch wanted subjects for execution, he thought these bulls the thing.

Dr. LORING, of Salem, being called upon, said he endorsed all that had been said in regard to the introduction of male stock, and inquired what is the most profitable breed of neat cattle for the farmers of Massachusetts. He was sensible of the good effect of blood bulls, but farmers had much neglected to supply themselves with them. He alluded to the valuable stock in the Connecticut Valley, introduced by Mr. Williams. They were grade Durhams, and were fitted for that place; in fact, they had done as well as in England. This stock, introduced in Essex county by Messrs. Parsons, Gore and Derby, showed a tendency to degenerate from an insufficiency of grass, and the speaker thought that the county, in this repect, was now about where it was then. Different localities require different breeds, yet we have no precise law upon the subject. Animals are influenced by climate; those of the valley of the Tees, in Scotland, are not fitted for the mountains. But what is the animal *we* need? In England, they require high-fattening and quick-growing herds for profit. We need a variety yielding milk, beef and labor. Dr. L. questioned the utility of animals of large carcass, with no muscular development. Because they eat well, some have thought them good for the dairy. But we should study economy in the selection of stock, and he thought the Short-Horn mixed with our native stock was an instance of it. Dr. L. also spoke of the old yellow stock of New England, introduced by our forefathers, and said it was regarded as good for milk, labor and beef. But he seemed to think that our farmers need a hardy breed, fitted to yield good milk, and in Essex, where feed is not abundant, he suggested the propriety of introducing a smaller class of cows. For beef and labor, he admitted the value of the Devons, but said we wanted special milkers, and alluded to the valuable dairy herd on the hills of Scotland—a breed not excelled. He asked why the Devons had not thriven here? The cause may be in the climate, soil or feeding. But the Herefords, too, he thought had degenerated; yet better feed would probably keep up the good character of both. He spoke highly of the Ayrshires, and recommended their introduction for dairy purposes.

Mr. WETHERELL, of Boston, being called upon, spoke of the skill required to keep up the good points of artificial breeds. Natural breeds do not degenerate. There is great vigor in their bulls (the buffalo, for instance,) and he advocated in breeding the importance of procuring the most vigorous males. Some of our bulls were not worth castrating for workers. The seminal product in all things was the best and most enduring in its influence when full, fair and vigorous, no less in the animal creation than in the vegetable; and in this connection Mr. W. cited the acorn, with some other seeds, and said the titman in pigs was always the smallest. We should breed only from the best and most vigorous animals, and the sire or dam should be of full blood. The speaker also inquired whether the dairy was the leading interest among farmers. Some in Hampshire county had fed for beef, and thought they could make from $18 to $20 more on an animal than from the dairy. In the purchase of animals, some could not discriminate and were cheated, while others possessed the art of "handling," and were less deceived. Mr. W.

also spoke of the difference between a *breed* and a *race* of cattle. The Devons and Herefords preserve their identity, but the Short-Horns are a cross, and need reproduction for their preservation. If Devons and Short-Horns are fifty years in different pastures, the Short-Horns will have the less marked character. The tendency of the latter is to run back or run out. Thus the difference between a breed and a race. The Short-Horns were regarded as good for beef, but in England the Devon beef would bring a cent a pound more; and the Hereford beef also took a high rank. In speaking generally of the flesh of the ox, he alluded to the beef in the valley of the Connecticut, and said that no where had he ever eaten any so tough! [Mr. Stedman responded, "We have sent away our best breeds!"]

Mr. LEWIS, of Framingham, spoke of premiums offered for grade bulls. He believed in going ahead, not downwards; and thought it better to breed from the grade than the native, but should not even do so where he could get the best blood bull. But these animals are not always at hand, and he intimated that the best and handsomest grades should be encouraged. The cattle disease, too, had made some farmers rather shy of foreign stock. He spoke of the first impregnation, and said it was the impregnation of the blood. He would drive a heifer to a blood bull first, and afterwards to grades, if necessary. Mr. L. alluded to the production of different colors in calves, and to Mr. Jacques's assertion of his power to accomplish it. Dogs sometimes are in circumstances to affect the color of the cow's offspring. Bulls, he thought, at no distant day, would be licensed. He mentioned an instance where a gentleman drove a native cow to a Short-Horn bull, and the progeny would bring $300. Speaking of the confusion in breeding, and the varied ideas of neat cattle, he said he would give $1000 to any one who would tell him how to stock his farm! Ohio had expended $10,000 for bulls, and he hoped that in every town in our State there would yet be a good bull kept. In conclusion, he said he wanted our foreign cattle quarantined.

Mr. HOWARD, of the *Boston Cultivator*, spoke of the importation of cattle, and said that no disease had been introduced except in the case of Mr. Chenery. He spoke of the adaptation of breeds to localities. The cattle introduced by Mr. Williams, were first placed on his farm in Northfield, of this State. But they were not adapted to that locality, and Mr. Lathrop, of South Hadley, took them to the valley of the Connecticut. Some of this stock was introduced into Essex county, and placed on the Derby farm for milk; but he could now see no blood of this breed. Mr. H. alluded to grade animals, and to the bull "Red Comet," and cited the mixture of his blood. This animal he praised, and said that when animals were promising they should be kept to try. We should have some rule, and where a stock of value is introduced, we should take care of it.

Mr. STEDMAN said the Phoenix bull was different from the Red Comet. We should breed even from the best grades, if we cannot get good blood bulls. He suggested that the color of the Devons might have been spotted.

Mr. LEWIS cited an instance in Mr. Buckminster's speckled steers, though they were not full blooded. He also spoke of some means by which cattle might be changed or modified in color. He related, too, a fact of a farmer having a white bull who passed by and down a street by his neighbors, when some of their cows had white calves! He also observed that he could breed a speckled calf, whatever the color of the bull.

Hon. JOSIAH QUINCY, Jr., being called upon, spoke of bad bulls, and thought it an indignity to any respectable cow to be compelled to come in contact with them. In regard, however, to breeds generally, he thought that for milch cows the secret of success was more in high feeding than in the breed; and he would venture to repeat that in regard to milk, manure or beef, you can get nothing out of a cow that you do not put into her. He had 90 cows, and could increase their milk daily from 100 to 200 quarts by feeding. A cow is as much a machine as a mill; the more you put in, the more you will get out. He thought crossing made the best cattle, and our native stock was the best as a basis. The intermixture of Scotch, Germans and Irish into our society had made us more robust, and produced our nation as it is. Mr. Q. spoke of Jacob, of Bible history, his skill in breeding; of the good beef of England, &c., of his visit to a cattle fair in Paris, where there was much contrariety of opinion as to what were the most profitable breeds of cattle. And so as to pigs; the question was about the pig that wanted somebody to take care of him, or the one that would take care of himself. To a question put to Mr. Quincy in regard to breeds, he said that he thought that the good qualities of cattle were more in individual animals than in breeds. He inquired of Dr. Loring if there was not a great difference in cattle of the same breed.

Dr. LORING replied, yes; but it was the elevation of the average that gave the breed its character.

Mr. CLARKE inquired of Mr. Quincy, if his experience had been large and well tested in regard to his views of no great difference in breeds.

Mr. Quincy said it had not been. To a question in regard to feeding, Mr. Q. said he used two tons a week of cotton-seed meal, and the manure it produced was worth about as much as the meal itself. He also feeds some Indian meal.

The hour for closing having arrived, the chairman announced the topic for the next discussion, which will be, *Farm Buildings*. Adjourned.

Correction.—In the remarks of Mr. Howard of last week, where the South Devons are spoken of as not superior for dairy purposes, it should have been *North* Devons. And in regard to the milk of the Kerries of Mr. Austin, the quantity should be from 12 to 14 quarts per day.

For the New England Farmer.

RETROSPECTIVE NOTES.

A NEW ERA FOR CHILDREN.—The communication of Mr. Bacon, with the above caption, printed in the *Farmer*, weekly, of Nov. 30th, and in the January No. of the monthly, is deserving of the attention of all the readers of this paper who are interested in the education of children, and who wish to see them instructed in all that concerns the science and practice of soil culture. We have examined portions of the "*School and Family Readers*," got up by Marcus Willson, and published by Messrs. Harper, of New York, and the result of our examination was a persuasion that every progress-loving parent, who should make himself acquainted with these works, would form a resolution that they should be introduced into the schools of the district. He would resolve, also, we felt persuaded, that they should be used in his own family, to give his children the means of becoming acquainted with the works of the great and benificent Creator and Contriver, and with the more interesting and useful productions of the world in which they are to live.

As to the other work—Emerson & Flint's Manual of Agriculture—by the publication of which "our young friends are blessed," as Mr. Bacon says, I have not yet found time to do more than glance at it; but am persuaded, from sundry notices of it which have appeared in reliable journals, that it will be found an excellent book in a farmer's family, if the father is intelligent enough to use it as a text-book, and devote these winter evenings, or other leisure time, to the hearing of recitations by his children, and to endeavors to increase its interest and instructiveness by apt and familiar illustrations and remarks from his own experience. While the older boy or boys are reciting and listening to their father's illustrations and remarks, the younger children will catch now and then an important item of information, and pretty certainly, also, a portion of that enthusiasm with which an intelligent farmer is likely to be inspired while thus engaged as the instructor of the older boy or boys.

Of its value in schools, experience will soon be able to give the most reliable testimony; but, as in the case of its use in the family, so too in schools, much will depend upon the intelligence, the tact, the inspiration or enthusiasm of the teacher. We hope it will be found well adapted to interest children as a school text-book, for if children become interested in the study of it, they will remain interested in after life, and thus we shall have hereafter more *mind* in our life-pursuit, and the business of farming more dignified, attractive and respected.

PREPARATION OF BONES FOR USE.—Of all the methods for preparing bones for the use of the farmer, this, which is described by Mr. Grennell, of Greenfield, in the *Country Gentleman*, and copied therefrom into this paper of Dec. 7th, and into the January No., at page 23, seems to be the best in several respects. The treatment with sulphuric acid is expensive and dangerous, and requires, moreover, the previous breaking down or grinding of the bones. The fermentation of bones, which was noticed in this journal last year, (see the weekly of Aug. 10th, or the September No. of the monthly,) under the head of "Dissolving Bones," though comparatively simple, cheap and easy, is not so much so as Mr. Grennell's process, and requires the breaking or crushing of the bones, which Mr. G.'s does not. He takes the bones as he finds them, and packs *without* crushing them. This is one of the points, perhaps the most important one, in which Mr. G.'s method of preparing bones for use is superior to all others: *There is no part of the process that can present any difficulty to any farmer.* For the majority of farmers this will undoubtedly prove the method which will be preferred to all others; and so simple and easy is it that hereafter there can be no excuse for those who neglect to pick up, and collect, and prepare for use all the bones about their premises. A barrel of bones thus prepared will be worth a quarter of a ton of *some* superphosphates.

As Mr. Grennell, in reply to a Canadian farmer who inquired through the *Country Gentleman*, as to the state in which the bones are found after being packed a year, and as to their applicability for turnip-manuring, has added a few items of information to those in the article under notice, we will here give an abstract of such as may be useful to those about to try Mr. G.'s method.

In *Country Gentleman* of Jan. 2, Mr. G. states that he finds the bones at the end of a year in every state of decay—that knuckles and shank-bones are occasionally slow to yield—that he commonly takes the undigested and throws them into a barrel for the next year, and that, as he uses the bones chiefly for grape borders and manuring pear and apple trees, it matters little about the fineness to which they are reduced. The ashes should be of hard wood, and fresh. MORE ANON.

MIDDLESEX AGRICULTURAL SOCIETY.

We have before us the *Transactions of the Middlesex Agricultural Society* for the year 1861, with a List of Premiums for the Exhibition in 1862. It is printed in a very handsome manner, by BENJAMIN TOLMAN, Concord, and comprises 114 pages. After a brief statement of the Exhibition, the first paper it contains is the Address of Ex-Gov. WASHBURN, the subject of which is —"*The Connection between the Social and Political Condition of a People, and the Mode of Holding and Cultivating their Lands.*" We had the pleasure of listening to this Address on the day of Exhibition, and found much in it to interest and instruct.

The pamphlet contains several very good reports,—a branch in which most of our County

transactions are deficient—viz.: One on *Roadsters*, by J. Cummings, Jr., of Woburn; one on *Milch Heifers*, by Winslow Wellington, of Lexington; one on *Poultry*, by E. Wood, of Concord; one on *Bread*, by Minot Pratt, of Concord; one on *Apples*, Class 1, by Samuel H. Pierce, of Lincoln; on *Apples*, Class 2, by Andrew Wellington, of Lexington; on *Peaches* and *Plums*, by E. H. Warren, of Chelmsford; one on *Grapes*, *Fruit* and *Melons*, by John B. Moore, of Concord; on the process of *Wine-Making*, by E. W. Bull, of Concord; on *Vegetables*, by James Gammell, of Lexington; on *Household Manufactures*, by Lilley Eaton, of South Reading; on *Flowers*, by E. W. Bull, of Concord; on *Bulls* and *Blood Stock*, by Peter Lawson, of Lowell. These reports are somewhat extended, and state valuable facts, or make interesting suggestions, which give the Transactions a value which they could not possess without them. The names of the officers for 1862 we have given heretofore.

For the New England Farmer.

THE USES OF LABOR TO MAN.

MR. EDITOR:—Man's nature is such as to fit him for the world which he inhabits. He was created in the image of his Maker—that is, God endowed him with mental faculties similar to his own, only that they were infinitely lower in the degree of their development. These higher powers, with his peculiar physical organization, distinguish man from the lower animals, placing him but "little lower than the angels, crowning him with glory and honor," and giving him dominion over the whole earth and sea, and all living things that inhabit them.

Man's physical organization is such, constructed with its limbs, its bones and muscles, cords and sinews, as to make it capable, under, and with the mental powers which guide and direct it, of obtaining all needed supplies for its sustenance and comfort. But, high as is the position which man occupies in the scale of being, labor is to him a necessity. Without it, in both departments of his two-fold nature, the effects of that immutable law are felt, according to which each faculty, not used, degenerates and wastes away like the share of the rusting plow. God, in His all-wise providence, has fitted the earth for man's peculiar nature. The riches it contains are not called forth simply at his bidding. He is compelled to call into action the exercise of all his faculties and susceptibilities, to obtain the necessaries of his life, and this exercise not only preserves, but strengthens and develops them. Use is the parent of development. Thus it is evident that the necessity which compels us to labor, is the result of one of the most benevolent of laws. Labor was a necessity before, as well as after the fall of our first parents, who in the beginning tilled and dressed the garden; therefore the poet mistakes in speaking of labor as the "primal curse softened to a blessing." Our first parents were removed from the garden, but outside of it, they could form and cultivate another, and while earning their food by the sweat of their brow, increase the health and strength of body and mind.

Our food is composed of elements which repose in earth's bosom, or float in the air and sea. Each seed is qualified to draw into its form the elements which its nature requires to start the germ and form the plant, and grow, develop, and mature. And at last the sun and air ripen it, and fit it for our use.

But all the time we must obey the laws of production which govern the growth of the plant, by placing it in the right soil, in a proper manner, and removing whatever obstacles may obstruct its growth. It might naturally be supposed that the less labor we were compelled to perform, and the more leisure hours we could gain, the greater would be our mental acquisitions. But as we look over the world and see a rough region like New England, where severe and protracted labor is necessary, standing in an intellectual point of view, pre-eminent among the people of the earth, and regions where a tropical sun and fertile soil remove the necessity of labor such as we perform, among the lowest mentally, that theory is disproved.

The labor doom of "honest poverty" should not be scorned. Poverty has compelled many of the mightiest intellects to develop those powers which would otherwise have lain inert. Many of the mightiest minds sprang into being in the home of poverty. Washington, though the son of wealthy parents, surveyed in his youth among the forests of Virginia. Webster was the son of a New Hampshire farmer, and labored with his father, in his childhood and youth. Burns, the plow-boy poet, first drew breath beneath a straw-thatched cottage in Scotland, and his

"A man's a man for all that,"

was composed in consequence of sneers at his toil-hardened hands, the scorners themselves, with their delicate fingers, never having performed that physical labor which disciplined and energized the mind, and gave force to the character of Burns, Elihu Burritt, "the learned blacksmith," Hugh Miller, the geologist, and thousands of other examples, might be cited to prove poverty and severe protracted labor to have been of great value in bringing out the latent energies of many of the leading minds, both of present and past ages.

But one great fact should be kept in view by the child of wealth, and that is, riches, if properly used, are a blessing. Washington, though wealthy, labored, and so can you. And by such labor, with only common talents, you can rise to such a position as to illustrate the truth of the proposition, that "those possessions which are, when abused, man's greatest curse, are, when properly used, his greatest blessing."

Jan., 1862. A MONTHLY READER.

TENACITY OF LIFE IN A FISH.

It is not unusual for the dealers in fishes for aquaria to find that some of them, the gold and silver carp especially, have leaped out of the water, and lie partially shrivelled up on the floor. They return them to the water, and they resuscitate, without apparently having suffered injury. We have known fish to be frozen in the aquarium for hours, and be as healthy and lively as ever when gradually thawed out. But a most remark-

able instance of tenacity of life in a fish out of its "natural element," occurred under our own observation a few days ago. A salt water aquarium had to be removed some distance, and the animals and plants, with a full supply of water, were put into a large zinc pail for conveyance. Among the animals was a sole, a fish which has the habit of clinging to the sides of the aquarium or any other perpendicular object. Following this habit, it was left adhering to the side of the pail when its contents were emptied into the aquarium. It remained there, without any water, for four days and nights. When found, it was still living, was returned to the aquarium, and for a fortnight has continued apparently healthy. We have not read of an instance of such tenacity of life in a fish out of its element.—*N. Y. Commercial Advertiser.*

WHAT IS ENGLAND DOING?

We are bound, in common civility, to take some interest in the affairs of foreign nations, seeing how tenderly solicitous they all are about ours. Indeed, it is not without some grains of satisfaction and complacency that we observe, in reading the foreign journals, how large an influence our conduct has upon the rest of the world. Just now, it is quite evident that all England, at least, is drawing a long breath of relief at her sudden extrication from danger of war with America. John Bull is very full of what he calls "pluck," and he really meant war, when he politely suggested the propriety of our releasing Mason and Slidell; that is to say, the British government had found an occasion to interfere with our affairs, in which their people would have supported them. The *people* of England do not want war with us. Their sympathies are with us, as they always are with freedom, and law and right. But the aristocracy are not our friends. They are jealous of our power, and of our republican institutions, and would gladly see us divided into several rival nations, instead of composing one grand and overshadowing power.

And now that Mr. Seward, so honorably and so adroitly, has avoided the threatened conflict, the people of Great Britain are really glad, and the government is obliged to pretend to be so. The English are a fair-minded people, and pride themselves on always doing the manly thing. We cannot help thinking that such a people, on the whole, must be a little ashamed of so violent and manifest an attempt of their government to make trouble with us, just while we were engaged in a pretty severe scene of family discipline. As the poet says:

"It don't seem hardly right, John,
When both my hands were full,
To stump me to a fight John,
Your cousin too, John Bull."

Everybody, everywhere, sees that, had we been at leisure to give our undivided attention to John just at that time, he would have been somewhat more polite, and a trifle less peremptory in his demands for satisfaction. But we are farmers, and our business is with corn and wheat, more than with great guns, yet it is surprising to see how much the actual fighting condition of the nation depends on its present supply of grain.

The old saying that "one cannot afford to quarrel with his bread and butter," applies with equal force to nations and individuals. The great obstacle to the forward movement of our vast armies is, not that we have not men and guns enough to march at once straight down to the Gulf of Mexico, but that we cannot transport supplies to feed the army in a rapid march.

England has ships and soldiers enough to have troubled us sorely, had she pounced suddenly upon us while we were in this death-grapple with rebellion; but her own journals clearly show, that she must have had a famine at hand next spring, such as she never felt before, had we accepted the war she proffered us.

SCARCITY OF GRAIN IN EUROPE.

The *Mark Lane Express* of January 20th contains estimates by correspondents, not controverted by the editors, which indicate so enormous a deficiency in the wheat crop, that it would seem that America, with her best endeavors, could hardly supply the demand, and it is quite certain, that had her trade been cut off by a war, the cry for food in the large towns of Great Britain would have been so loud as to have drowned all complaints for want of cotton. The estimate is as follows. We hope our readers will take the trouble to understand it.

	Bushels.	
The regular crop of wheat in Great Britian and Ireland is		164,000,000
Short planted for last crop ¼	40,000,000	
Short yield of that sown	20,000,000	
Quantity shed by being over-ripe	8,000,000	
Extra quantity taken for seed for crop of 1862	6,000,000	
Exported to France from August to December, 1861	8,000,000	— 82,000,000
		82,000,000
To which add the usual importation		40,000,000
Making the requirements		122,000,000

It is admitted that France will want in all, for the year, 80,000,000 bushels, and probably more, because the chestnut crop, which usually feeds two millions of people in France, failed last season, while Italy, Spain, Portugal and Belgium had all of them bad harvests.

It is estimated that since September 1, 1861, there have been imported into Great Britain and Ireland 19,200,000 bushels of wheat and flour, turning the flour into grain, against 32,800,000 for the corresponding period in 1860, and that France, up to January 20, had imported but little more than one-third of her necessary supply. The granaries of Great Britain were probably never so empty at this season of the year, as now. Yet the

price of wheat in London is not very high, being about $1,90 per bushel, just about the same as it was in January, 1847, the year of the Irish famine! and yet before the first of June that year the price had advanced to $3,20 per bushel! and through the famine that ensued, and its consequences, nearly two millions of the Irish population were swept from her naturally fertile soil!

It is difficult to see how the wants of England and France are to be supplied. We exported, in 1847, nearly $69,000,000 worth of breadstuffs, and in 1854, nearly $66,000,000. There is a vast surplus now on our hands, but it is not at the seacoast, nor can it be until navigation opens, and it is a question for the old countries who need it, to solve, how their supply is to be obtained.

We may well feel proud that with our vast army operations in hand we have enough and to spare, for those whose policy toward us is such that we can maintain the friendly relations of commerce.

AGRICULTURAL STATISTICS.

Nothing strikes an American in England so forcibly and constantly as the spirit of conservatism. In our country, it is a pretty good reason for changing an idea, that it is an old one, and because, in the nature of things, there should be some improvement, some progress. In England, on the contrary, what has been must be. That a horse-railway should go through a street in London seems impossible to an Englishman, simply because there never was one there, while every American sees that street-railways are just what every great city needs. England has no system of obtaining agricultural statistics, and nobody knows, except by guess, how many cattle or sheep are in the country, or the product per acre of her crops. Constantly there are movements to induce the government to institute measures for obtaining this essential information, in some reliable manner. Why is it not done? Ask a farmer the question, and he inquires "What good will it do?" One reason why the farmers oppose it is this: They occupy their land under leases, usually not written, and not for any definite term, yet they remain from year to year, and are really more permanent in their homes than New Englanders who can own their farms, but sell and exchange them as readily as their horses, and who, in fact, rather enjoy a change of locality once in a few years. Now, the English farmers all fancy that if their landlords really knew how much profit they were making, their rents would be raised. Besides that, they are watched enough already, especially where game is preserved, and where a game-keeper is prowling about their farms night and day, to prevent the boys from catching a hare or a partridge on the farms where they were born. A recent proposition that the police officers should be employed to collect agricultural statistics, was met with a general burst of indignation by the farmers, and there really seems to be no prospect that any movement in this direction will be made. The estimates which are given above are derived from observations by dealers and others about the markets, and from custom house records and the like. Very accurate statistics were obtained for a few years throughout Scotland, by one of the agricultural societies, but that is understood to be given up.

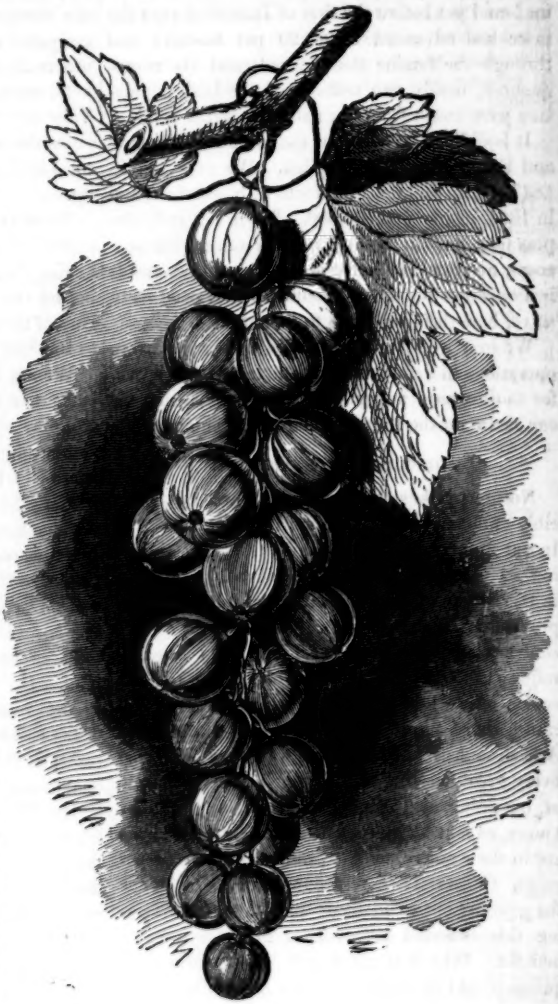
There is the same jealousy in England, in the matter of general education, many good men believing that it would be of no advantage to the laboring classes to be educated. Perhaps that is true, if those laborers are to have no opportunity to improve their condition.

We are inclined to think that the slave-holder is right in keeping his slave in ignorance, if he intends he shall remain a slave, and the same reasoning applies to any mere man-machine. Yet, there is a better spirit than this abroad in England. The late Prince Consort, who seems never to have been appreciated in England till his death, was a warm advocate of education for the laboring classes. He was, moreover, a lover of agriculture, and an active advocate of progress, and just before his death, had accepted the position of President of the Royal Agricultural Society of England. He was no doubt, too, a friend to America, and remembered gratefully her kind reception of his eldest son. We may, as agriculturists and philanthropists, join in regrets that his life so suddenly closed, and may offer our sincere sympathy to Her Majesty in the loss of her nearest earthly friend, who was indeed a friend of the poor and the oppressed, and of progress everywhere, rather than of the statesmen and nobles of the land, who were too jealous of his growing influence with the people, to accord to him in his life, the praises in which they now so zealously unite.

AN ESQUIMAUX RIFLEMAN.—As we were in the open country, and there was no tangible object to shoot at, he made a circle in the snow of about two feet in diameter, then, stepping in the centre, raised his gun perpendicular from the shoulder, and fired in the air. After firing he stepped out of the ring, and in a few seconds, to my astonishment, the bullet came down within the circle he had made. He coolly remarked, "we want no targets to fire at;" and if a man can hold his musket with that precision as to cause the ball to return just where he stands, what need has he of a butt? But the principal reason why they thus test their shooting is an economic one. Not always being able to get bullets, they are chary of firing them away, and I have no doubt it is for the same reason that so many savage people have the "boomerang," or return missile.—*Recollections of Labrador Life by Lambert De Boilieu.*

DANA'S TRANSPARENT WHITE CURRANT.

DRAWN AND ENGRAVED EXPRESSLY FOR THE N. E. FARMER.



Among the most successful cultivators of garden fruits is Mr Francis Dana, of Roxbury. He has originated several pears of the best quality, and two or three currants which promise to rank equal to any ot the new foreign varieties. The accompanying illustration shows one of these, to which Mr. Dana has given the above name.

The bunch from which the drawing was made was furnished us last August by Mr. J W. Foster, of Harrison Square, and is only a fair representation of the berry and cluster. The flavor of this currant is excellent, size very large color more transparent than the White Dutch, and the berries do not appear to fall from the end of the bunch before ripe.

The currant is one of the hardiest of the smaller fruits. It is very easily propagated, will grow with but little care, and under any ordinary cultivation, will return a large crop every year.

THE SNOW.

The snow was proverbially called the "poor farmer's manure" before scientific analysis had shown that it contained a larger per centage of ammonia than rain. The snow serves as a protecting mantle to the tender herbage and the roots of all plants against the fierce blasts and cold of winter. An examination of snow in Siberia showed that when the temperature of the air was seventy-two degrees below zero, the temperature of the snow a little below the surface was twenty-nine degrees above zero, over one hundred degrees difference. The snow keeps the earth just below its surface in a condition to take on chemical changes which would not happen if the earth were bare and frozen to a great depth. The snow prevents exhalations from the earth, and is a powerful absorbent, retaining and returning to the earth gases arising from vegetable and animal decomposition. The snow, though it falls heavily at the door of the poor, and brings death and starvation to the fowls of the air and beasts of the field, is yet of incalculable benefit in a climate like ours, and especially at this time, when the deep springs of the earth were failing and the mill streams were refusing their motive powers to the craving appetites of man. If, during the last month, the clouds had dropped rain instead of snow, we might have pumped and bored the earth in vain for water; but, with a foot of snow upon the earth and many feet upon the mountains, the hum of the mill-stones and the harsh notes of the saw will soon and long testify to its beneficence. Bridges, earth-works, and the fruits of engineering skill and toil may be swept away, but man will still rejoice in the general good and adore the benevolence of Him who orders all things aright. The snow is a great purifier of the atmosphere. The absorbent power of capillary action of snow is like that of a sponge or charcoal. Immediately after snow has fallen, melt it in a clean vessel and taste it, and you will find immediately evidences of its impurity. Try some a day or two old, and it becomes nauseous, especially in cities. Snow water makes the mouth harsh and dry. It has the same effect upon the skin, and upon the hands and feet produces th painful malady of chilblains. The following easy experiment illustrates beautifully the absorbent property of snow: Take a lump of snow (a piece of snow

crust answers well) of three or four inches in length, and hold it in the flame of a lamp; not a drop of water will fall from the snow, but the water, as fast as formed, will penetrate or be drawn up into the mass of snow by capillary attraction. It is by virtue of this attraction that the snow purifies the atmosphere by absorbing and retaining its noxious and noisome gases and odors.—*Exchange.*

For the New England Farmer.

WOOL GROWING.

DEAR SIR:—A party of young gentlemen of the writer's acquaintance are proposing to emigrate to California, for the purpose of embarking in the wool-growing business. If the accompanying semi-playful, semi-serious lines, suggested by the simple fact above stated, have, in your estimation, vigor enough in them to *go alone* outside the little circle in which the circumstances of the case are known, you are at liberty to print them.

Respectfully yours, THE AUTHOR.

Boston, January 30, 1862.

ACADIA.

Away with all the Babel-war of trade,
With all the din by strong-limbed labor made,—
The smoke and rush which business loves to make
Where'er sharp Jonathan drives down his stake,—
The train's shrill whistle ushering from afar
The panting engine, and the clattering car,—
The dashing craft that scorns th' opposing wind,
Her streamers trailing like a cloud behind;
Away with all that hints of toils and cares,—
Bills, bonds, stocks, interest, merchandise and wares—
Which tell the texture of the age is one
Of gold and iron, intricately span!

Time's wheels reverse, and down the travelled track
Roll back the years—by centuries roll them back!
Till earth again shall joyfully behold
Her childhood days—her age entirely gold!
What time the shepherds drove their flocks along
The silver streams, and meditated song:
Or stretched at noon beneath the greenwood shades,
Rehearsed the beauties of their sylvan maids;
When simple pleasures discontent defied,
And wants were few, and those with ease supplied;
Fair girls were "nymphs," and every youth a "swain,"
All speech was song—when Pan himself did reign!
Roll back the years till men again shall view
That age of joyance—live it o'er anew!

But, nay! there needs no rolling back of time—
Nought save the transit to one genial clime;
And that same *onward* circling of the spheres,
Which hath aforetime swelled the months to years!

In that famed region of the West, whose soil
Yields mainly gold to glad the sons of toil,
There lies a vale, through which a winding stream
Doth like a thread of burnished silver gleam,—
Where pastoral life—believe the Muse!—displays
To modern eyes the scenes of ancient days;
Where dwells a colony of gentle swains
Whose lungs the atmosphere of cities pains;
A group of people who, on history's page,
Will doubtless shine th' ACADIANS of the age;
On whom the country will depend, to keep
The art of rearing and improving sheep!

When Spring again shall don her robes of green,
And bees and butterflies once more be seen;
When primrose blooms shall star the dales anew,
And violets lift their lips to sip the dew,
And yellow crocuses flaunt forth their gold;—
'Twould give mirth's eye a twinkle, to behold
These "shepherds" grasp their crooks and lead along
Their milk-white flocks—throng slowly after throng.
'Twould brighten languor into smiles, to hear
Those gentle shepherds' "songs of lofty cheer"—
Or lays expressive of their ardent loves—
Float down the vales, and echo through the groves!
O, well will they the artless strain prolong—
Their thoughts prove idyls bubbling into song!

For them propitious seasons we invoke—
Upon their lambkins fall no blasting stroke!
The calm delights of pastoral life be theirs;
Its blest exemption from financial cares;
Its sheer disdain of Fashion's starch and paints;
Its glorious freedom from the town's restraints!
May robust health that flow of spirits bring
Which makes life's prime as joyous as its spring;
Theirs be the heaven of sweet domestic bliss—
The luxury theirs of tasting childhood's kiss!
May the *new* race to goodly stature grow,
Without the wisdom which the marts bestow;
Delight in Nature with her bosom bare—
The pathless hills—uncarbonated air;
Wearing no mask made up of wretched shams,
Scorning the cheatery of cant and flams;
With scarce a cloud between them and the power
That gilds each star, and speaks in every flower;
Walk through the years—let worldlings, sneering, smile—
As little children ignorant of guile,
Until they reach—why may they not?—at last
To something of the ancient patriarch cast;
And like those men who lived in Time's far youth,
Through goodness' paths attain high heights of truth!
And if the world in after times once more
Shall need, like Sodom in the days of yore,
To save it from destruction's fiery rain,
Its men whose lives appear without a stain;
Then shall that vale, through which a winding stream
Doth like a thread of burnished silver gleam,
Send forth its "fives," its "fifties" o'er the earth,
And save the nations with its leaven of worth! ***

For the New England Farmer.

THE BRAHMA FOWL.

Having recommended to the readers of the *Farmer* of March 2, 1861, the Brahma fowl above all other varieties, I was pleased to find in a recent number of the *Genesee Farmer* an account of the experimental trial in France, at the Zoological Gardens, last year, testing the laying qualities of a large number of different breeds of fowls, resulting in favor of this breed. The *Brahma Pootra* stood first in the trial as the most prolific layer, which corresponds with my experience, as stated before. I have kept nearly every breed of fowls, but never found one to come up to the Brahma, not only in laying, but every other desirable quality requisite to a perfect breed of domestic fowl. A neighbor of mine has 17 Brahmas in one coop and 20 common barnyard fowls in another, fed and cared for alike; he tells me that he is getting from ten to twelve eggs per day from the Brahmas, and from the others he has not had an egg for the past month. Another gentleman informs me that he has always been obliged to purchase eggs for his family until this winter. He has tried many breeds of fancy fowls, and was almost discouraged, until induced to try the Brahmas, and this winter his fowls have been an income instead of an outset, as heretofore. JOHN S. IVES.

Salem, Jan. 31st, 1862.

For the New England Farmer.

ABOUT KEEPING GOATS.

The goat is a very social creature, and readily becomes attached to his protectors, and even to animals different from himself. We have heard complaints that a goat about the house is noisy, but if two or more are kept together they will soon learn to become very contented and quiet. They are frequently kept in stables with horses, under a belief that their peculiar smell contributes to the health of horses, but it is probable that whatever benefit is derived comes from the familiar companionship of the goats, for horses are fond of company to cheer the solitude. I have a goat which has formed an intimacy with a bantam pullet. The latter follows her about all day, and roosts near her head at night, which fond attentions are returned by various marks of sympathy. The famous friendship between Robinson Crusoe and his goats was as natural and sincere on their part as on his. They will become as familiar as dogs, and will come at the call of the voice with a hop, skip and jump. When roaming at large, they regularly return home at night. In Switzerland, large flocks come down to the farm-houses at night to be milked, and are turned out again in the morning to browse upon the mountains. They stand to be milked as quietly as a cow. A familiar illustration of their domesticity is afforded in their serving to draw children's carriages, often appearing to delight in their gay equipages. In India, the children of the Hindoos who have lost mothers were frequently suckled by goats. Travellers report that, in the countries of the Negroes, this is very frequent. The goat comes to the cradle where the infants lie, and manifests the utmost tenderness toward them.

The flesh of the older goats is said to be coarse and ill-flavored, but that of the kids when very young is much esteemed. It is freely eaten in Europe, and in the Southern countries it is served at table as regularly as lamb, and by most persons is considered the more delicate of the two. In Wales, where goats used to be very numerous, the haunches are frequently salted and dried, and supply all the uses of bacon, and are called "hung venison."

The goat is a lascivious and prolific creature. The female goes with young upwards of twenty weeks, and usually produces two at a birth, and sometimes three and even four. She sometimes breeds twice in the year. In the natural state, the coupling season is in November or December, and the kids are then born in the spring, when the tender herbage appears; and this is the best time, although when well fed she will receive the male at any season. She is fruitful at the age of seven months, but it is considered well that she should not breed before the second year. The usual life of the goat is stated to be from ten to twelve years.

Goats in the pasture are not likely to be worried by dogs, as sheep are, for they are bold in their own defence, putting themselves in an attitude of defiance when provoked by animals, however larger than themselves. A dog that will despise a ram and assail a bull, is frequently cowed by the bold demeanor and peculiar and vigorous butting of the goat.

There is one great objection to the keeping of goats in town, which is, that they will devour every plant and small shrub, and bark every tree, within their reach. The latter form of mischief seems to be their especial delight. They must therefore be kept out of the garden, the orchard, and the nursery. In Wales, and other parts of Great Britain, where goats used to be numerous, they have been largely discarded of late years, on account of the damage done by them in cropping the hedges, which are there so common. So in the wide districts of Europe, they are discouraged on account of the injury they do the vines and forests.

The history of the goat is interesting. From the remotest times it has abounded in Europe, Asia and Africa, and has formed a large part of the wealth of the common people. Its ancient history is coeval with that of the ox and the sheep, and it is frequently mentioned in Scripture as forming with those animals the riches of the patriarchal families. His flesh was permitted by Moses to be used as food, and he was employed by the Jews as well as by the Egyptians, in religious ceremonies. His form is sculptured on the ancient monuments. In Greece and Rome he was valued for food and raiment. He was dedicated to Jupiter, sacrificed to various divinities, and his skin was the Ægis of the Goddess of Wisdom and Arms. His form was one of the attributes of Pan and the Satyrs, indicating the procreative power and rustic plenty. The goat was largely cultivated by all the early nations round the Mediterranean Sea, (where the finest kinds now are,) and by the Celtic and Teutonic nations in the North.

There are numerous varieties of the common goat, determined somewhat by climate and situation. Some naturalists suppose them all to have descended from the species Ægagrus, found wild in the Caucasian mountains. Others think they came from various distinct species. The small Guinea goats have been naturalized in America for a hundred years, but preserve their distinctive peculiarities unchanged.

The uses of this animal are numerous. We hrve spoken of its milk and flesh. The skins, as furs, form warm clothing in the northern countries. Without the wool, they are an important staple of commerce, to be made into leather. From goat skins we have the fine morocco leather for boots and gaiters. The skin of the kid is in universal demand for the manufacture of kid gloves. In Eastern countries, the skin is made into bags for water, wine and oil; and on the Nile, the Euphrates and other rivers, it is seen in the form of buoyant sacks, on which the inhabitants float across those streams. The hair of the goat, which may be sheared like wool, makes a superior rope, especially serviceable to be used in the water. With ropes of this material, the hardy natives of St. Kilda used to swing themselves over the dreadful precipices of their coast in search of the eggs of sea-fowls. The celebrated goats of Thibet, yield a fine wood, of which the splendid and costly Cashmere shawls are woven, with great pains and immense labor. The Goat of Angora, in Asia Minor, furnishes a long, silky, wavy hair, from which a kind of camblet is made, much prized for its durability. Of this material are formed the tents of the Arabs, the Turcomans, and all the wandering tribes of Tartary. A simi-

lar fabric is referred to in the Scriptures, "And thou shalt make curtains of goats' hair to be a covering upon the tabernacle." (Ex. 26: 7.)

Some attempts have been made to establish the Thibet and Angora goats in this country, an account of which at some time might be interesting.

G. L. STREETER.

Salem, Jan., 1862.

THE HORSE-HAIR.

In Professor Agassiz's interesting paper on "Methods of Study in Natural History," the second of the series in the *Atlantic Monthly*, we find this anecdote of an animal known to almost all country boys:

A gentleman from Detroit had the kindness to send me one of those long, thread-like worms (*Gordius*) found often in brooks, and called horse-hair by the common people. When I first received it, it was coiled up in a close roll at the bottom of the bottle, filled with fresh water, that contained it, and looked more like a little tangle of black sewing silk than anything else. Wishing to unwind it, that I might examine its entire length, I placed it in a large china basin filled with water, and proceeded very gently to disentangle its coils, when I perceived that the animal had twisted itself around a bundle of its eggs, holding them fast in a close embrace. In the process of unwinding, the eggs dropped away and floated to a little distance. Having finally stretched it out to its full length, perhaps half a yard, I sat watching to see if this singular being that looked like a long, black thread in the water, would give any signs of life. Almost immediately it moved towards the bundle of eggs, and, having reached it, began to sew itself through and through the little white mass, passing one end of its body through it, and then returning to make another stitch, as it were, till the eggs were at last completely entangled again in an intricate net-work of coils. It seemed to me almost impossible that this care of offspring could be the result of any instinct of affection in a creature of so low an organization, and I again separated it from the eggs, and placed them at a greater distance, when the same action was repeated.

On trying the experiment a third time, the bundle of eggs had become loosened, and a few of them dropped off singly into the water. The efforts which the animal then made to recover the missing ones, winding itself round and round them, but failing to bring them into the fold with the rest, because they were too small, and evaded all efforts to secure them, when once parted from the first little compact mass, convinced me that there was a definite purpose in its attempt, and that even a being so low in the scale of animal existence has some dim consciousness of a relation to its offspring. I afterwards unwound also the mass of eggs, which, when coiled up as I first saw it, made a roll of white substance about the size of a coffee-bean, and found that it consisted of a string of eggs, measuring more than twelve feet in length, the eggs being held together by some gelatinous substance that cemented them and prevented them from falling apart. Cutting this string across, and placing a small section under the microscope, I counted on one surface of such a cut from seventy to seventy-five eggs; and estimating the entire number of eggs according to the number contained on such a surface, I found that there were not less than eight millions of eggs in the whole string.

For the New England Farmer.

BREEDS OF STOCK.

In times gone by, I have taken an interest in breeds of cattle, and all discussions that tended to illustrate what classes of cattle were best suited to the farms of New England. This inquiry will depend somewhat upon the uses to be made of the cattle, If they are to be fed for the stall, this is one thing; if they are to be kept for dairy purposes, this is another. On most of our farms neat cattle are kept for the milk they will yield—therefore those which yield the greatest quantity, the quality being equally good, are to be preferred. So far as I have seen, and I have seen many herds, I have never seen any that would yield more milk at the same expense of feed, than our New England stock, sometimes called native. For this reason, I have ever been an advocate of our native stock, and shall not be disposed to abandon them until others are proved to be superior. I know there are here and there to be found choice animals of the imported breeds—such as the Durham, the Devons, the Ayrshires, the Jerseys, the Herefords, &c., which have done great things. But I have never seen any considerable number of such animals on any one farm—and know not now where they are to be found. I had supposed our friends Howard and Sheldon, could tell us all about these animals. Certainly, no men among us have had more extended opportunity for observation. Mr. Howard has visited the best herds of England and Scotland for the express purpose of learning all about them—and Mr. Sheldon has been a man of practical experience, ever since I was a boy, and there is no one who will deny him the credit of being a shrewd observer—of animals and men.

The real question is, how shall we select a stock of cattle suited to our farms? I say, choose those which yield the best product on the same expense of feed. And from the best cows raise your own calves, always taking care to use bulls that sprung from good cows. For in rearing stock, quite as much depends upon the sire as upon the dam. I remember this was the opinion of my old master Pickering.

J. W. P.

Feb. 10, 1862.

ROOT CUTTER AND CLEANER.—A writer in the *Country Gentleman* says:

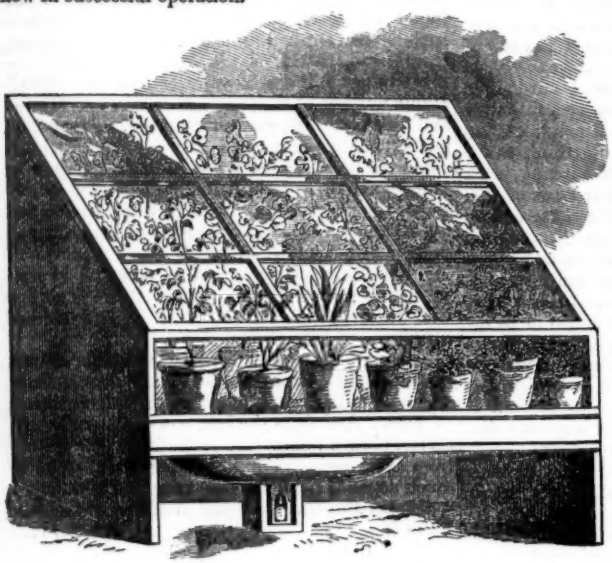
When potatoes are fed whole, or other roots are cut coarsely, the animal is obliged to hold its head so high to keep the root in contact with its teeth, that gravitation alone will pass it to the gullet, and ordinarily it will pass thence unmasticated, if not too large; but if cut properly and mixed with cut stalks, straw or hay, as they always should be, they will be eaten with the head down, as in eating grass, and consequently be more thoroughly masticated and mixed with other food, and all danger from choking is wholly avoided; hence the preventive that I have used for five years, and recommended to others to use, is, to cut up the vegetables as finely as possible with a good root cutter and cleaner.

For the New England Farmer.

A NEW PROPAGATING CASE.

I have no doubt that many of the readers of the *Farmer* have often wished that they had facilities for propagating plants and flowers where bottom heat is necessary, such as starting very early tomato, cabbage and lettuce plants, striking cuttings of grapes, roses, &c., and starting early plants for the flower-garden. But to start the former very early, or to strike cuttings successfully, requires a gentle bottom heat, and an atmosphere completely under our control. The few who are fortunate enough to possess hot-houses, have, of course, all the facilities for such purposes; but of the many who would like now and then to propagate a few plants or flowers for their own use, or pleasure, not one in one hundred have either hot-houses, or even hot-beds. And then the latter, (hot-beds,) are really troublesome and expensive affairs, and but few can afford either the time consumed in making and tending them, or the expense of operating them.

For the possible benefit of these many, I propose to give a description of a small propagating case I had made for my own use, and which is now in successful operation.



It may be briefly described as a box, 33 inches long, 18 inches wide, 18 inches high in front, and 24 inches high at the back. Twelve inches above the bottom, we placed a zinc pan, or tray, two inches deep, and as large as the case would admit of. This pan rests on cleats, nailed to the inside of the case. On the under side of this zinc pan, we soldered the oval shaped copper bottom of a common cooking-stove wash-boiler, such as may be found at almost any tinsmith's. (Sheet iron, copper, or tin, may be used instead, if more convenient.) This forms a sort of boiler, about fifteen inches long, six inches wide, and two inches deep. It is filled through a tube, from the upper side. For convenience, this tube should be about six inches long, and one-half or three-fourths of an inch in diameter. On the top of the case, we simply lay two squares of glass. To prevent the glass from sliding off, the upper edge of the case is halved. The boiler is filled with water, a common fluid lamp is filled with alcohol, and placed under the copper boiler, (burning fluid will answer, but is less clean, and is rather offensive to the smell,) the zinc pan is covered one inch deep with clean sand, the pots (smallest size flower-pots) containing the seeds, or cuttings, are placed on the sand, a small thermometer is hung inside the case, the glass is laid on, and the miniature hot-house is in full operation. It should be placed near a window, where it can receive the benefit of the sun during the day. The thermometer should not be allowed to go below 50°, nor above 60° at night, but may rise to 70°, and even 80°, in the middle of the day. Care should be taken to ventilate well in the day time. This is done by raising the back edge of one or both panes of glass, according to circumstances. With these very general hints as to temperature and ventilation, there need be no difficulty in managing such a case successfully.

I have found that a steady flame, three-fourths of an inch high, from a single tube of a common fluid lamp, is amply sufficient for ordinary winter weather. (The larger the lamp, the less trouble in filling it.)

My case is usually placed, when in operation, at the kitchen window. It looks well enough, however, to grace the windows of the sitting-room, or even parlor. Such a case should be made of well-seasoned wood, be dovetailed together and thoroughly painted inside and outside. If the window be high, the case will need legs—or it may be placed on a table—so as to bring the pots near the glass. The lower half of the back of the case is hinged, for convenience of managing the lamp. My first case was but 12 inches deep at the back, and 6 inches in front, and the lamp had no protection against drafts of air. This was found to be troublesome, and I was obliged to box in the lamp. Now all the heat is saved, the lamp is secure, and the extra room is convenient for storing spare pots, &c.

As the boiler is placed in the centre of the case, it will readily be seen that that part will be the warmest. This is taken advantage of, by appropriating it to the use of such pots as need the most bottom heat, gradually removing them toward the edges as they need to be "hardened off." If the case is divided into two parts, by a partition, one part can be used, at pleasure, for this hardening off process, preparatory to placing the plants in the ground, or elsewhere.

These cases can be made of any size or style desired. They are neater, easier operated, and cost less than the ordinary hot-bed. The one above described, though placed in a room where the fire is never kept over night, and seldom even in the evening, consumes but one gallon of alcohol per

month, at a retail cost of 60 cents—or two cents per twenty-four hours. The cost of the case was as follows:

Lumber and making, $2,25; copper boiler bottom, 70 cts.; zinc and making of pan, &c., 75 cts.; two squares glass, 50 cts.; lamp, 20 cts.; painting, 50 cts.; castors, (for convenience of moving,) 17 cts; hinges, 6 cts.; thermometer, 37 cts.; total, $5,50. These are city prices. In most localities they would be somewhat less.

A case of the above dimensions contains room for fifty-four No. 7 flower-pots. It will be readily seen from this, that it can be made to do a great deal of work.

PEOPLE WHO HAVE BEEN HELPED.

There is really very little that can be done for one man by another. Begin with sense and genius, keen appetite and good digestion, and the work goes on merrily and well; without these, we all know what a laborious affair, and a dismal, it is to make an incapable youth apply. Did any of you ever set yourselves to keep up artificial respiration, or to trudge about for a whole night with a narcotized victim of opium, or to transfuse blood, (your own, perhaps) into a poor, fainting, exanimate wretch? If so, you have some idea of the heartless attempt, and its generally vain and miserable result, to make a dull student apprehend, a debauchee interested, active, or knowing in anything beyond the base of his brain, a weak, etiolated intellect hearty and worth anything. And yet how many such are dragged through their dreary *curricula*, and by some miraculous process of cramming, and equally miraculous power of turning their insides out, get through their examinations; and then—what then? Providentially, in most cases, they find their level. The broad daylight of the world, its shrewd and keen eye, its strong instinct of what can and what cannot serve its purpose—puts all, except the poor object himself, to rights. Happy is it for him if he turns to some new and more congenial pursuit in time.—*Dr. Brown.*

SINGULAR DETECTION OF A THIEF.—A musician employed at one of the London theatres, possessed an ebony flute with silver keys. He seldom used it, however, in consequence of one of the upper notes being defective. The muscian had for a lodger. a young man, a theatrical tailor, and between the two there existed a considerable friendship. Well, one night, while the musician was away at his business, some one stole the flute with the silver keys, and suspicion fell on an old char-woman, who used to come to do the housework. However, nothing tended to show that the old lady really was guilty, and the affair was shortly forgotten. In a few months the tailor left the house of the musician, and went to live in a town a few miles off; but as the friendship between the two men still existed, they occasionally visited each other. Nearly a year afterward, the musician paid the tailor a visit, and was pleased to find him in possession of a beautiful bulfinch who could distinctly whistle three tunes. The performance was perfect, with this exception—whenever he came to a certain high note, he invariably skipped it, and went on to the next. A very little reflection convinced the musician that the note in which the bulfinch was imperfect, was the very one that was deficient on the flute. So convinced was he, that he at once sharply questioned his ex-lodger on the subject, who at once tremblingly confessed the guilt, and that all the bird knew, had been taught him on the stolen flute.—*Beeton's Home Pets.*

EXTRACTS AND REPLIES.

SALT AND PIGS—SCRAPING TREES.

Being a reader of your valuable paper, I will take the liberty to make a few inquiries.

Is salt good for young pigs? If so, in what manner, how often, and in how large a quantity must it be given? I have a pig that has a cough—is there any remedy for it?

Is there any harm in scraping trees in the fall or spring? If not, when is the best time?

A. I. NEWHALL.

East Saugus, Feb. 8, 1862.

REMARKS.—All animals, even fowls, need salt. We know of no rule for giving it to them. Feed a small quantity two or three times a week to the pigs, and if they flourish under it, continue to do so, and increase the quantity as they increase in size.

Feed the pig with a cough on warm, nutritious food, but not in large quantity, and give him a *dry, warm* place, where he can lie and sleep without being at all chilled. He will be grateful enough to soon recover.

If trees are thickly covered with moss, they are probably in an unhealthy condition. Scraping will be useful to them, but breaking up the sward, manuring and cultivating will be better. It is doubtful whether scraping young trees is of further use than to gratify the eye. The bark upon a tree which has always had a healthy growth, will sometimes be very rough—but that it does any injury, either by harboring insects or in any other way, we have never learned. It may be some protection against summer suns, and perhaps winds. We are not aware, however, that it does any special injury to scrape away a portion of it, if it is done with care, at any season of the year.

WILL THE ARMY WORM COME AGAIN?

Can you tell me if the army worm is sure to appear again where it was last year? Many farmers in this vicinity had fine crops completely destroyed by them; they seemed to relish everything but potatoes. So unexpected was their appearance last season, (I never saw any before,) that we come to you to know if they are to make their advent again *this* summer coming.

I am exceedingly anxious to know, not wishing to go to the expense and labor of sowing seed the profits to be reaped by them.

Fisherville, R. I. CALEB CONGDON.

REMARKS.—We have no doubt but the army worm, so called, that did so much mischief last summer, will appear next summer. But we cannot *promise this* positively.

EXPERIMENTS WITH POULTRY.

Below I give you the result of a few experiments in keeping hens. The first was with 13 hens and a cock. My hens are what is called the "common fowl." I sold

172 dozen eggs, for	$23,08
Sold poultry	5,67
Kept 40 pullets	10,00
	$43,75
For cost of keeping	29,55
Profit	$14,20

Second experiment with 55 hens.

520½ doz. eggs and poultry sold, with value of those left for my own use	$155,70
Cost of feed, &c.	101,28
Profit	$54,42

Third experiment with 159 hens. They laid in a year 1,556¼ dozen eggs. Average to a hen one year, 117 45-100, and thirty of them had chickens to bring up. From Dec. 1 to June 1 average to a hen 64 eggs.

By eggs and poultry sold	$292,66
By pullets, extra from what I commenced with	9,81
By Leghorn cocks for sale	12,00
	$314,47
To cost of feed	$162,74
To rent, tools, interest	11,50—$174,24
Leaving profit of	$140,23

I now have to keep 226 hens and 17 cocks. I find the Leghorn white fowls the best I have got for laying and eating, as their flesh, being yellow, sells better in market than the Bolton Greys, which lay quite as well. I have the Leghorn fowls for sale at $2,25 a pair, and eggs for hatching at 75 cents per dozen.

In trying to raise chickens without the hens going with them, I found that what I raised cost when hatched, 7¼ cts. I find I have much the best luck in raising chickens in letting the hen have 25 to 30 each, in a coop. In the above experiments I have not given any credit for manure, which will sell, I think, for about 33 cts. a hen, or as some think, it will raise a bushel of corn, if properly taken care of, and applied to the ground.

JOHN M. MERRILL.

Bristol, N. H., Feb., 1862.

TURNIPS FOR SHEEP.

I would like to inquire through your paper whether the flat English turnip is good for sheep in the winter months, when they can be raised at a small cost? SUBSCRIBER.

Mechanicsville, Vt., 1862.

REMARKS.—Excellent, no doubt. Cut them into small pieces, and feed them once a day, a quart or two to each sheep.

ATTACHING A SAW TO A THRESHER.

Will some of the readers of the *Farmer* inform me how to attach a large saw to a common threshing machine? E. B. P.

Mechanicsville, Vt., 1862.

TREATISE ON THE SILKWORM.

Will some of your readers inform me what is the title of the best treatise on the culture of the silk-worm in New England, and where it is to be obtained? C.

LADIES' DEPARTMENT.

WINTER SCENES.

That old red sleigh, with its long box that never was full, for down in the straw, wrapped in the robes, or on one or another of the four seats it contained, there was always room for one more! What a grouping of bright, young faces there used to be in it—faces in hoods, in caps and in blankets; hearts that have loved since; hearts that have broken; hearts that have mouldered. And away we went over the hill and through the vale, under the moonlight and under the cloud; when the stars were looking down; when the sun kindled the world into a great, white jewel. But those days have gone forever away, and the sweet old necklace of bells, big in the middle of the string, and growing small by degrees, has lost its power over the pulses.

In that old sleigh, brides have gone away before now—those that were married to manhood, those that were "married unto death." Great ships have gone over the waters with less of hope and happiness than that rude craft has borne over the billows of winter. Swan-like shapes now glance along the arrowy way, but give us, for its sweet memories of yesterday, the old red sleigh.

Then, the days when we were "coasters," and down the big hill, by the maple wood, through the little pitches, far into the valley, we came with merry shout, each the solitary Palinurus of his own small craft. How like a flock of swallows we were, dashing down the declivity, in among a group of sleds, side by side with a rival, shooting by like an arrow, steering in gallantry ahead like a jockey, and on our way up with a sled in tow, ere the party had reached the valley below!

And then it was, when the wind had swept away the snow from the pond and stream, and the ice was glare, that we put on the "rockers," and darted hither and thither, and cut sixes and eights, and curves without number, and drew the girls we loved, and whirled them like leaves over the highway of crystal.

And the schools where we spelt each other down, and the schools where we sang Windham and Mear, and the schools where we ciphered and wrote, and "went up"—gone, all gone, teacher and taught, like the melting snow under the rainbows of April.

And when, sometimes, after the great snow, the winds came out of the north for a frolic, what wreathing and carvings of cold alabaster there were! What Corinthian adornings surmounted the fence posts! what mouldings were fashioned beside the way! what fairy-like caves in the drifts! what flowers of rare finish and pendants of pearls on the trees!

Have you quite forgotten the footprints we used to find in the damp snow, as delicate, some of them, as a love-letter; the mysterious paths down to the brook or by the old hollow tree, that we used to wonder over and set "figure fours" by, if perchance we might catch the makers thereof? Have you quite forgotten how sorry you were for the snowbirds that fluttered among the flakes, and seemed tossing and lost in the storm?

And there, in the midst of that winter, Christmas was set, that made the Thanksgiving last all through the night of the year—and what wonder

the stars and fires burned more brightly therefor—Christmas, with its gifts and its cheer, its carol and charm, its evergreen branch and its bright morning dreams; Christmas, when there were prints upon the chimney-tops, if we were only there to see them, where Santa Claus set his foot as the clock struck twelve; Christmas, when stockings were suspended by hearth and by pillow, all over the land—stockings silken and white—stockings homely and blue, and even the little red sock, with a hole in the toe? Blessed forever be Bethlehem's star!—*Chicago Journal.*

THE SICK IN BED.

With a proper supply of windows, and a proper supply of fuel in open fireplaces, fresh air is comparatively easy to secure when your patient or patients are in bed. Never be afraid of open windows, then. People don't catch cold in bed. With proper bed-clothes, and hot bottles, if necessary, you can always keep a patient warm in bed. Never to allow a patient to be waked intentionally or accidentally, is a *sine qua non* of all good nursing. If he is roused out of his first sleep, he is almost certain to have no more sleep. It is a curious but quite intelligible fact, that if a patient is waked after a few hours' instead of a few minutes' sleep, he is much more likely to sleep again; because pain, like irritability of brain, perpetuates and intensifies itself. If you have gained a respite of either in sleep, you have gained more than the mere respite. Both the probability of recurrence and of the same intensity will be diminished, whereas both will be terribly increased by want of sleep. This is the reason why a patient waked in the early part of his sleep, loses not only his sleep, but his power to sleep. The more the sick sleep, the better will they be able to sleep. A good nurse will always make sure that no door or window in her patient's room shall rattle or creak; that no blind or curtain shall, by any change of wind through the open window, be made to flap; especially will she be careful of all this before she leaves her patient for the night. If you wait till your patient tells you or reminds you of these things, where is the use of his having a nurse?—*Florence Nightingale.*

A Hint or Two.—To keep ice from windows, take an ordinary paint brush or sponge, and rub over the glass once or twice a day a little alcohol, and it will keep the glass as free from ice as in the middle of summer; and it will also give as good a polish as can be got in any other way.

Isinglass is a most delicate starch for muslins. When boiling common starch, sprinkle in a little fine salt; it will prevent it sticking.

For fruit and wine stains, mix two teaspoonfuls of water and one of spirit of salt, and let the stained part lie in this for two minutes; then rinse in cold water; or wet the stain with hartshorn.

Careful Reading.—It is not unusual that the second reading of any work is more profitable than the first; and the third or fourth often results in new discoveries of much value and profit. The truth is, most of us read too superficially. We study and analyze too little—in other words, we think too little—don't we? Let us reform in this respect.—*Rural New-Yorker.*

How to Cook Eggs in the Shell.—A correspondent of the *Agriculturist* writes:

One way to cook eggs is to drop them into boiling water, and let them remain there three minutes—the water all the time boiling. This hardens the white next the shell to almost leathery toughness, while within it is still not cooked. Another and preferable mode is, to pour boiling water upon the eggs; let them stand in this five minutes; pour off this, and add more boiling water, and immediately bring them to the table *in the water.* Those taken out at once will be somewhat cooked through; and those left in five minutes will be "hard boiled," or nearly so, and thus the taste of every one may be suited, and no toughness of the whites be observed.

YOUTH'S DEPARTMENT.

LITTLE CHILDREN.

The scattered crumbs upon the floor;
The rattling playthings by the door;
The finger-marks on point and pane—
All are signals showing plain
There are little children here.

The tongs outstretched upon the floor;
A broken ark, and shipwrecked Noah;
A horse with tail, nor ears, nor mane—
All are signals showing plain
There are little children here.

The high chairs ranged against the wall;
The small coat hanging in the hall;
The little shoes, and little cane,
Add to the signals showing plain
There are little children here.

But now I must resign my pen;
The children have come back again;
They but ran out in mud and rain,
To bring new signals, showing plain
There are little children here.

PLAYING FOR KEEPS.

We are told that this story is *real,* as children say. There are a great many little boys who are in the habit of playing for keeps. We hope they will not only read this story, but that they will resolve never to take this their first lesson in gambling:

"See, mother, what a lot of marbles I've got!" said John. "I want you to make me a great big bag to put them in."

"Why, where did you get so many, my son?" asked his mother.

"I won them from Pete Jones. See, I got his glass taw, too. I loaned him one of mine to play with while he put that in the ring. Isn't it pretty?"

"How much did you pay him for them?"

"Pay him! Nothing. He and I played for 'keeps,' and I was the best player, and won all his."

"How much did they cost, Peter, do you suppose?"

"If he bought them, they must have cost him about a dollar."

"And you got them for nothing?"

"I played 'upon the square,' and Pete said I got them all fair."

"So now you have got a dollar's worth of marbles, for which you never paid one cent!" said his mother, slowly and with emphasis.

John, who was an honest boy, looked at her as if he did not fully comprehend the extent of her meaning.

"Mr. Lowly," continued his mother, "is a gambler, and he wins other people's money in the same way. He plays 'upon the square,' he says."

As the truth flashed upon John that he was a gambler, he burst into tears, and asked his mother what he must do. After showing him how little evils expanded into greater, and how persons were tempted to cheat and defraud when there was a prospect to make anything by it, she told him to return all Peter's marbles, and then go and ask God to forgive him.

Peter seemed very thankful to get his marbles back. John left him whistling a merry tune, which seemed just like he was saying, "Johnny an't going to be a gambler."

EDUCATED FEET.

Who can tell to what uses the feet and toes could be put, if a necessity arose for a full development of their powers? There is a way of educating the foot, as well as the hand or the eye; and it is astonishing what an educated foot can be made to do. We know that in the time of Alexander, the Indians were taught to draw their bows with their feet, as well as with their hands, and Sir J. E. Tennent tells us that this is done up to the present time by the Rock Veddahs, of Ceylon. And nearly all the savage tribes can turn their toes not only to good, but bad account; like the aboriginals of Australia, who, while they are cunningly diverting your attention with their hands, are busily engaged in committing robberies with their toes, with which they pick up articles as an elephant would with his trunk. So also the Hindoo makes his toes work at the loom, and weaves with them with almost as much dexterity as with his fingers. The Chinese carpenter will hold the bit of wood he is planing by his foot, like a parrot, and will work a grindstone with his feet. The Banaka tribe, who are the famous canoe-men on the West African coast, will impel their light canoes—weighing only from eight to ten pounds—with great velocity over the waves, and, at the same time, will use the foot to bail out water; and when they would rest their arms, one leg is thrown out on either side of the canoe, and it is propelled with the feet almost as fast as with a paddle. There was also Monsieur Ducornet, who died only four years ago, who, although he was born without hands, was brought up as an artist, and who annually exhibited at the Louvre pictures painted by his feet. Then there was Thomas Roberts, the armless huntsman to Sir George Barlow, whose feet were made to perform the duties of his hands. And there was William Kingstone, who with his toes wrote out his accounts, shaved and dressed himself, saddled and bridled his horse, threw sledge hammers, and fought a stout battle, in which he came off victorious.—*Cuthbert Bede's Glencreggan.*

THE CATTLE MARKETS FOR FEBRUARY.

The following is a summary of the reports for the four weeks ending February 20:

NUMBER AT MARKET.

	Cattle.	*Sheep.*	*Shotes.*	*Live Fat Hogs.*
January 30	804	2470	400	200
February 6	1294	3571	250	150
" 13	989	3238	250	50
" 20	1810	2502	150	—
Total	4897	11811	1050	400

PRICES.

	Jan. 30.	*Feb.* 6.	*Feb.* 13.	*Feb.* 20.
Beef cattle, ℔ lb	4¼@6¼c	4¼@6¾	5 @7	5 @6¾
Sheep, live weight	4½@6	4½@5¾	4½@5¾	4½@5¾
Swine, stores, wholesale	3½@4½	3½@4	3½@5	4½@5¼
" " retail	3½@4½	4 @5	4 @6	5 @6
Live fat hogs	3¾	3¾@4½	4¾	

At this market, prices and estimates of beeves are based on the total weight of hide, tallow and dressed beef; in New York, on the weight of beef alone; a difference of something like one-fifth. That is, an animal whose four quarters weigh 100 lbs. each, would be rated in Brighton as dressing about 500 lbs., and in New York at 400 lbs., and consequently 4c ℔ lb. in this market would amount to the same sum as 5c ℔ lb. in New York. The "fifth quarter," as the hide and tallow are often called, is heavier, in proportion to the meat, in very fat than in light animals.

REMARKS.—The Northern cattle and sheep at market the past month have been very good, many of them being really well fatted. But few stores have been offered for sale, and but few have been called for.

In the price of working oxen and milch cows, there has been but little change during the month. Our reports of sales have not been very numerous of either class. Pretty good oxen are sold at from $75 to $130 ℔ pair, and cows from $25 to $45.

The cattle and sheep alluded to in the following paragraphs were at Brighton Market, February 20:

MAMMOTH CATTLE.—Messrs. Scollans & Flinn put five of their Western beeves into a yard by themselves on Wednesday, which were visited as curiosities by nearly every person on the ground. They were fed by J. Dennis, Esq., of Niles, Cayuga Co., N. Y. One pair of Durhams which had been in his stable for three years, weighed at Albany 6050 lbs. Another five-year old pair, of the "moolly" or no-horned race, weighed at home 5000 lbs., and at Brighton 4800 lbs. But the lion of the party was a four-year old steer, which weighed at home 2900 lbs This steer had no appearance of being over-grown or awkwardly fat, deeply as his ribs were covered, but was well-proportioned, tidy-looking and pretty spry, notwithstanding his great weight. The same might be said of the Durham oxen, while, to my eye, the no-horns were less comely. The whole lot were rich animals, such as I have not been accustomed to look upon, and good judges said, such as are seldom seen either in Brighton or N. York. I understood they were not sold at the time I saw them, nor did I learn the price, but it is to be hoped that the lovers of good beef will reward Messrs. Scollans & Flinn, not only for the pleasure they may enjoy at the dinner-table, but for that afforded to the many admirers of "neat stock" who saw them at Brighton.

GREAT SHEEP.—Wales, Curtis & Sinclair sold to J. W. Hollis 9 Cotswold and Lester sheep which weighed at Albany 2400 lbs., or an average of 267 lbs. each. They were all smooth wethers, no horns or stags in the lot. Four of them were raised in Albany county, and 5 in Genesee. Only 1 had been slaughtered, and that yielded 33 lbs. of rough tallow, which we were told, Mr. Hollis said was the largest amount he ever took from any one sheep before. Those acquainted with the kind of sheep slaughtered by Mr. Hollis for many years past will not need any further particulars of this lot, except that we understood the sheep cost about $25 each.

COMPARATIVE VALUE OF OATS AND ROOTS.—Four and two-thirds pounds of oats are estimated by analysis to contain a little over one pound of flesh, muscle and fat forming principles; to equal that it will take, of carrots, nearly nine lbs.; of Aberdeen turnips, near twenty lbs.; and of Swedish turnips, near seventeen pounds. It will be seen that the difference is greatly in favor of oats.